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THE SPHERE

Vol. CLXXVII No. 2308 WITH WHICH IS INCORPORATED THE GRAPHIC APRIL 15 1944

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A. 166

Said MR. PEEK to MR. FREAN:
"*Our Northern friends may think we're mean*"

Said MR. FREAN to MR. PEEK:
"*Let's tell them there's no need for pique!*"

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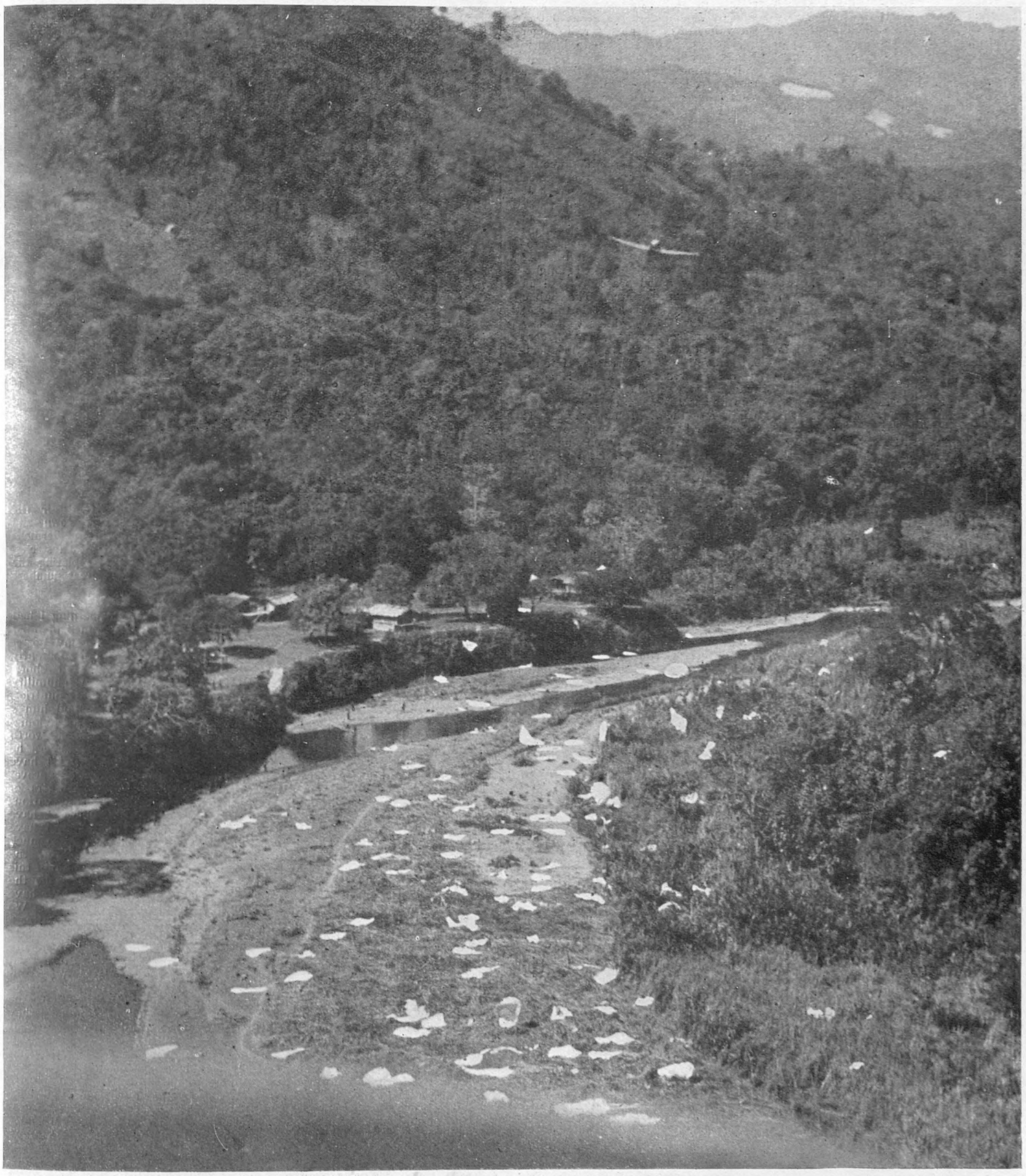
LAMPS

(L. 44)

Volume CLXXVII No. 2308 The SPHERE, London, April 15, 1944

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly



HOW THE 7TH DIVISION ON THE ARAKAN FRONT IN BURMA WAS SAVED BY A REMARKABLE SUPPLY FEAT. **Aircraft actually dropping the supplies by parachute to the men on the ground : one of the planes can be seen in the picture flying over the jungle clearing**

The successes of the Fourteenth Army on the Arakan front owe a great deal to the remarkable feat of a Troop Carrier Command in South-East Asia, which supplied a whole Division by air for eleven days after they had been encircled by the Japs. On February 5 the 7th Division was cut off in the jungle, and supplies for men and guns were running low. A signal was sent to Troop Carrier Command and every available R.A.F. and American transport aircraft was mustered. Brig.-General Old, U.S. Commanding Officer of Carrier Command, himself led the first sortie. In all, 440 sorties were flown and 1,540 tons of supplies were dropped to the Division : they were provided with food, petrol, ammunition, medicine—everything they needed to beat the Japs to a standstill. As the world now knows, the 7th Division finally fought its way back into India and safety. Only one of the planes employed on this big supply task was lost, and even that delivered its precious cargo. The picture above shows how the aircraft operated, dropping their loads by parachute over a clearing in the jungle. Tiny figures of men can be seen on the spit of land in the centre of the picture, preparing to gather up the supplies (See *also pp. 76-77 of this issue*)

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A WAR NEWSLETTER —No. 241

1, NEW OXFORD STREET, W.C.1.

Timing.—I suppose it may be taken for granted that the Russian advance is ahead of schedule—that is to say, that the Russian fronts are already on and beyond the limits estimated as possible or probable by the date conceded as the first possible date for the beginning of the *Western* assault, when these matters were settled by the Big Three over the conference table months ago. How near the Western Allies are to readiness, I have no idea at all. The multiplicity of things to be done must be staggering, and the miners and other strikers must have thrown a spanner in the works. The Russians have delivered the goods with a vengeance. The German armies of the south have disintegrated. Disciplined units, but not enough, are still fighting stubbornly to defend Lvov. But to the south the German armies, including the Crimea Army, are more concerned to save their skins than to hold a line defending the Balkans and the vital oil supplies remaining to Germany. The Russians might well say: "Now is the psychological moment. It 's now or never." But, mercifully, we have proof at last (and Russia admits it) that the "Second Front" has already played a notable part in the Russian triumph. It is patent that divisions of worth have been withdrawn to guard the Western Wall; the *Luftwaffe* long since has been decimated in the eastern sky to defend the western war potential of the Nazis, and instruments of war have poured into Russia steadily, thanks to the defeat of the U-boats and the obliteration of the Nazi fleet. The war of nerves can never be enough by way of Western Invasion; but it has already played a vital part in the war on two fronts, and the Western Allies' air assault has proved an all-out Second Front, with nobs on, comparable in power and in result with the Russian land assaults from Riga to Odessa, and not less continuously sustained. I fancy that, in the last months at least, the Russians (who are hard to satisfy) have found less to quarrel with in the efforts of their Western Allies. But if weeks more pass and the invasion from the west is not launched, it may be another story.

More Ways Than One.... But here again speculation is a beating of the air where speculators are totally in the dark in matters and decisions of higher strategy. We are inclined to watch for signs over against the Channel Ports. Hitler's headache would be less intense if the Channel Ports were the only entry into the Fortress. But he can't rule out Norway or the Low Countries, and has to remember the existence of General Maitland Wilson. Political events, like battles, are imponderable. Alternative plans must exist to meet imponderable political events, as in battle they exist to meet the chances of military developments unforeseeable; and any day events in the Balkans may switch the watching eyes to other weak patches in Hitler's dam. Italy, too, is likely to flare up again soon. The stalemate there cannot last for ever, and now the weather is mending at last. Altogether, the war of nerves has proved a more than useful Second Front and the air assault has proved (as Mr. Churchill said) "worth trying" as a means of knocking out Germany from the west. The two to-day seem almost good enough to do the job from our side; but not quite. The great adventure—on the most optimistic estimates available to-day—remains inevitable, and everything points to the present ripeness of the psychological moment.

Winston Churchill.—On the eve of what, pray God, will be the last great "climacteric" and national test in war in our time, I find it important (personally) to re-examine and restate my faith in our great leader who did so much to guide us out of the valley of death and mortal danger in the worst crisis in our history. Recent events in Parliament have left a deep impression on me and left me more fogged about the truth of things—vital things—than ever before. I should put first among Mr. Churchill's qualities as a leader, courage, loyalty to those who serve him, optimism, a serenity of mind which enables him to shuffle off anxiety and doubts, breadth of mind and vision, which have enabled him to see things on a larger scale than most and to outlaw the petty and nationalistic jealousies. As a man he is frank and open, and he might admit to a confidant that he is arrogant but not vain, truculent but not bitter, a natural fighter who, in a fighting life in war and peace, has derived stimulus from warfare. The public would add that he is a sportsman and a good fellow. History has set him now in a rare niche, among perhaps a score of historically great English leaders. *Do you think he likes worship?* I doubt it. He is a great and thorough Englishman, a strong upholder of our constitution and traditions and, I believe, an admirer of the English character. It never has been, and is not now, the English way to adulate national leaders. We will never set a Premier or a Government on a pedestal and glorify them as saviours of their country. We know too well how much of the credit is due to the nameless heroes and heroines in the front line and on the home front. Leader-worship and hero-worship are revolting to us. We have too much sense of humour and perhaps of justice. (We prefer to worship film-stars and football aces.) The Führer and heil-Hitler business makes us vomit. If democracy means anything, it means that we tease and criticise most those whom we most admire and trust. I believe Mr. Churchill understands this and in his own case would prefer it. He has certainly done the same thing in his time in politics.

And a Memory from the Dim Past.—The other day the House of Commons—I don't understand a tithe of the underlying implications—went a shade too near to the detestable Führer business, as it seemed to me. And it disquieted me, because that House is supposed to represent the opinions of the people of a free country. My anxious speculation amounts to this: at that moment did the Premier for once go beyond a natural arrogance and truculence (qualities for which we rather admire him) and sip the heady wine which makes Führers glow and posture under the sun of public worship and adulation? If it were so, I make no doubt he had that "morning after" feeling and henceforth will prefer our criticism and teasing and affection and trust to any manifestations of slavish worship. Hell, yes; we are free companions, not Fritzes. And Mr. Churchill is above all an Englishman, a sportsman, a good fellow, a free companion. Many years ago, in the dodo age before wars, a rising statesman, already of Cabinet rank, had shown a certain arrogance in Parliament and, on a social occasion, met retribution on the banks of the Thames at the hands of two Oxford undergraduates. He took this exhibition of rough-house (a very extreme example) as only a sportsman, an Englishman and a good fellow could. It has always stuck in my memory. Such are the qualities which make men fit to lead free Englishmen. Leave haloes to saints and dictators.

The Pentecost of Calamity.—I do not know who first coined this phrase, which was the title, I believe, of a notable book. It is a phrase which sticks in memory. It is apt to-day, and yet, on its face, inapt to a phase of the war in which the harvests of long years of toil and suffering are coming in in golden sheaves to our arms and to Allied arms in every theatre and element of war. But (another phrase!) there are always "two nations" in every nation, *Jean qui rit* and *Jean qui pleure*. "Men must work and women must weep." The shout of them that triumph, the sobs of them that grieve. We sit and wait and scan the news columns here at home in the brief intervals of our ceaseless labours, and we clearly see those two nations side by side, the two aspects of the late stages of a world war. Some are cheering, some are weeping, some are thinking of themselves, some of those who will return no more. Some are hoping and some have no more to hope for. Those daily casualties lists. Our eyes turn to them, we fear to look, we cannot choose but look. And hardly a day passes now but some other old friend is shown bereaved again; generation after generation the curse runs on, the father of the boy and now the boy himself, sacrificed to the Moloch of War. Small wonder if the imbecility looms larger than the inevitability of war in thoughtful minds, and if even unanswerable arguments seem to weaken. O Death, where is victory when those who might turn it to good account are the price of victory? Words, words, what use remains to words? They learned the worth of words in the days of the Tumbrils and in the Temple Prison. "No letters, please"—we have come to regard the request as a necessity and as a concession to those who suffer and those who would show their sympathy. The Pentecost of Calamity falls in the day of triumph, and war is shown up for what it is.

HOW THE INHABITANTS OF CASSINO WERE WARNED OF THE BOMBING OF THE MONASTERY. Copies of this leaflet were scattered over the town and Monastery before the American bombers went over to drive the Germans out of the ecclesiastical buildings which they had converted into a stronghold on the Fifth Army's front. Smoke-shells—with leaflets replacing the smoke charges—were exploded over the area, sending down great numbers of the warnings

Dangers of Humility.—In time of war, bread cast on the waters of Fleet Street is found again after many days. I was surprised by a letter from the other side of nowhere referring to something I had written in THE SPHERE on September 11, 1943, just come to my correspondent's hand! I had apparently spoken of the danger and short-sightedness of ultra (and false) humility in our relations with other countries. My correspondent has behind him a long and wide experience of Colonial Administration; and it is worth quoting what he said, because he clearly felt what he said: "I have read with the most intense approval your paragraph on the dangers of ultra-humility. From the various ends of the earth in which I have served since this war began, I have seen, and been humiliated by so much of this that I beg you to repeat the dose and give us as much more of this medicine as you can." I shake the bottle and repeat the dose. We have a great record as a great people. We are once more a great nation, after a dangerous decline. We live in a world of vulgar publicity, commercially based. People have learned to trust those nostrums which are most confidently and most often advertised; they make "best-sellers" of the books most confidently puffed; they "cure" themselves with patent medicines most widely advertised. Merit unadvertised or worth that blushes unseen is merit unrecognised and without influence. The world needs influence and has a chance to-day to benefit from an influence based soundly on worth, not publicity. When a time for greatness came we rose to the occasion. We made ourselves once more a great people. The whole muddled, distressed world of nations cries out for a lead from those great enough to lead. Among these is Britain to-day. Those, then, who apologise for Britain are traitors. Those who fear to be great are craven. Let us show to the whole world the strength, the confidence, the dignity, the serenity of our re-won greatness as a nation, always, in all our relations with the world, at home and abroad. "God grant our greatness shall not fail through craven fears of *being* great."

THE OLD STAGER

FIGHTING in the STREETS of CASSINO TOWN

HOW THE NEW ZEALANDERS PENETRATED INTO THE RUINED TOWN: A platoon commander crouches amongst the shattered buildings as he tries to pick off a German sniper. Often the two opposing forces were only a few yards away from each other, ensconced among dug-outs and strong-points

CONTACT WITH THE TROOPS IN THE TOWN IS MAINTAINED BY RADIO: Two soldiers (who both hail from London) operate the wireless-set installed amidst the ruins of a shattered building in Cassino town

The battle for Cassino and Monastery Hill began in earnest on March 15, when Allied bombers subjected the town to the most intensive bombardment of the war. For four hours the bombers flew back and forth: and when they ceased a terrific artillery barrage opened up. New Zealand, British and Indian troops then entered Cassino. After they had captured a large part of the town, they lived in honeycombed dug-outs among the heaped-up rubbish and the ruins of what were once houses. German patrols at the same time were also using the many ready-made dug-outs, and were approaching to within a few yards of the Allied positions. The ruins were constantly under shell- and mortar-fire, and snipers of both sides were waiting only for an incautious movement to indicate a target. For six days the New Zealanders remained in Cassino, eating and sleeping at odd moments and continually on the alert for enemy movements

MEN OF A NEW ZEALAND INFANTRY BRIGADE TAKING PART IN THE GRIM STRUGGLE. Making use of every available piece of cover, they advance towards strongly-held German positions

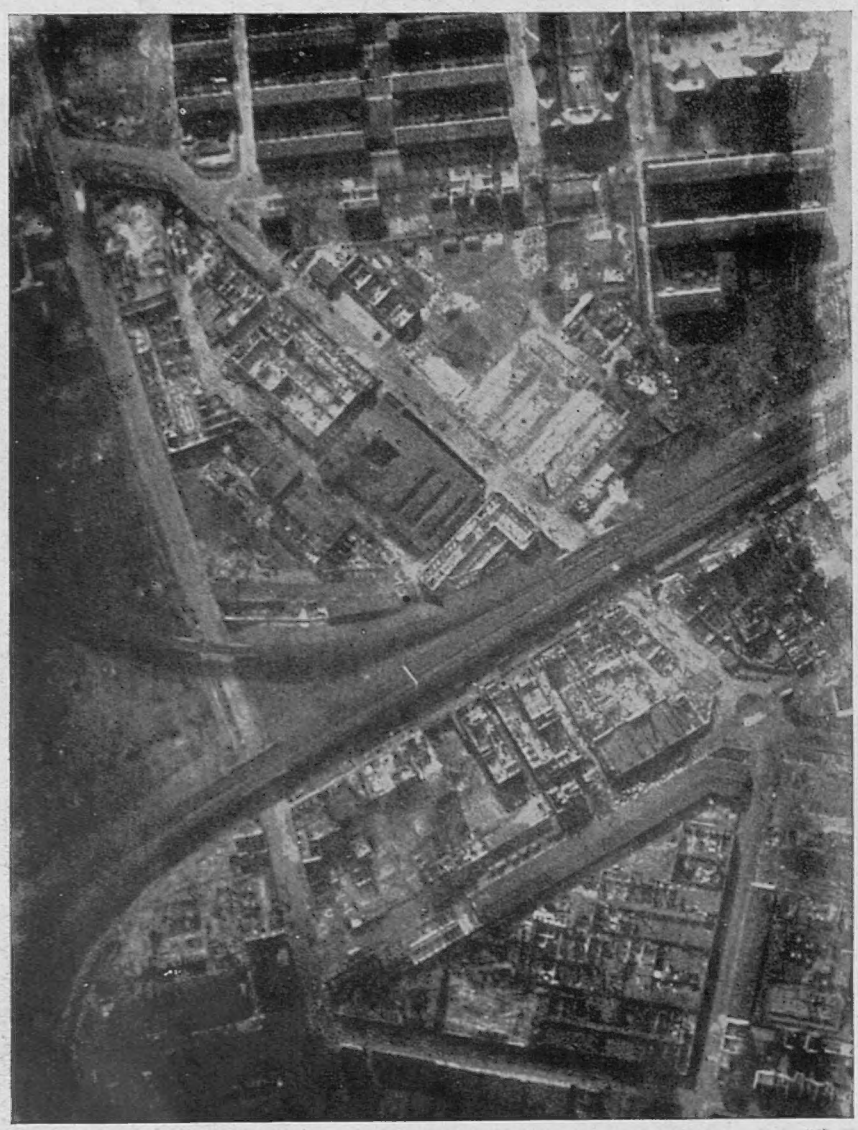
NEW ZEALANDERS FIRING THROUGH A DOORWAY at enemy "Spandau positions" 100 yards away: the latter are strong-points equipped with batteries of machine-guns, of which there were a number in Cassino town and on the slopes of Monte Cassino

HOW THE INFANTRY PUSHED ON THROUGH THE RUINS: Keeping close to the wall, these New Zealanders penetrated right into the heart of the town, where they stayed for six days

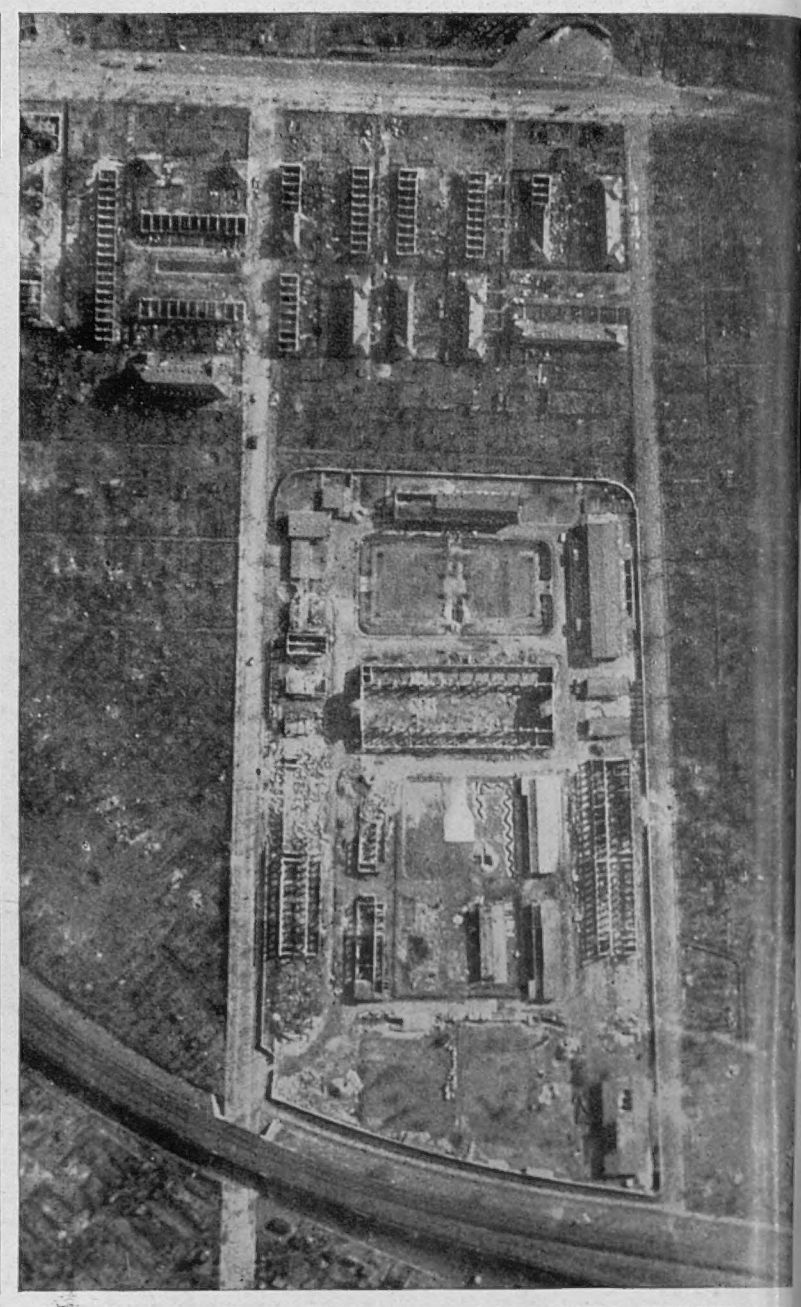
GERMAN AND FRENCH PLANTS DESTROYED

As the Result of British and American Bombing Raids

—With Two Radio Pictures of the Tragic Bombing of Schaffhausen, in Switzerland



AFTER THREE GREAT RAIDS ON FRANKFURT, important chemical and engineering city of 600,000 inhabitants. Part of the important Alfred Teves main engineering works, engaged on the manufacture of motor components. Here extensive damage is seen among machine-shops and other buildings covering a considerable area



ANOTHER RECONNAISSANCE PICTURE SHOWING WIDESPREAD DESTRUCTION an severe damage among buildings of the aircraft components branch Alfred Teves G.m.b.h. at Frankfurt. Machine-shops have been gutted an stores have suffered extensive damage as the result of the three raid

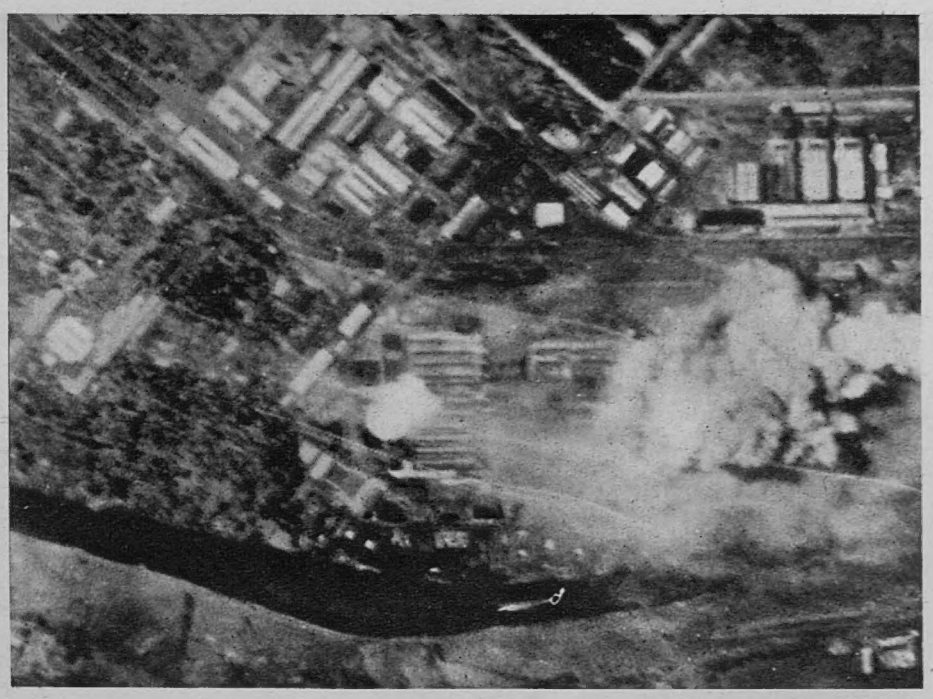
Reconnaissance pictures from Frankfurt have shown that almost th whole of the commercial and administrative part of Frankfurt h been practically destroyed, following the heavy attacks by aircraft Bomber Command on the nights of March 18-19 and March 22-2 and the daylight one by the American Eighth Air Force the 24th. Fires were still burning some 60 hours after the nig attack and 30 hours after the daylight attack. Devastation exten to the dock area in the east of the city, and also to the west, whe there are many warehouses and commercial premises. Frankfurt one of Germany's key cities, for it is the centre of her chemic industry. But, apart from the chemical plants, there are also scor of other factories producing war material for the enemy. Among th many products manufactured in Frankfurt are motor vehicles, milita transport of all kinds, aircraft components, detonating apparatus for nav mines, precision-measuring instruments, special electric gear (includin range-finding apparatus for the Navy), and small arms ammunitio

THE ACCIDENTAL RAID ON THE SWISS TOWN OF SCHAFFHAUSEN, ON THE RHINE. Smoke rising from the bombed area after the "tragic" error in judgment which resulted in American Liberators dropping their bombs on the town

Schaffhausen is the capital of a Canton of the same name: it forms an enclave within German territory on the banks of the Rhine. By a tragic error the town was bombed by a force of American Liberators: reports have stated that thirty-five people were killed, fifty-five were seriously injured and from 200 to 300 were rendered homeless. A hail of explosive incendiary bombs descended on the town: each wave of bombers seems to have been composed of from twenty to thirty planes. Schaffhausen was immediately covered by a pall of dust and smoke, with flames visible from a point nearly 20 miles away. Mr. Cordell Hull has referred to the "tragic bombing by American planes," and has stated that the United States Government will make reparations. The two pictures reproduced here were sent by radio shortly after the tragic occurrence

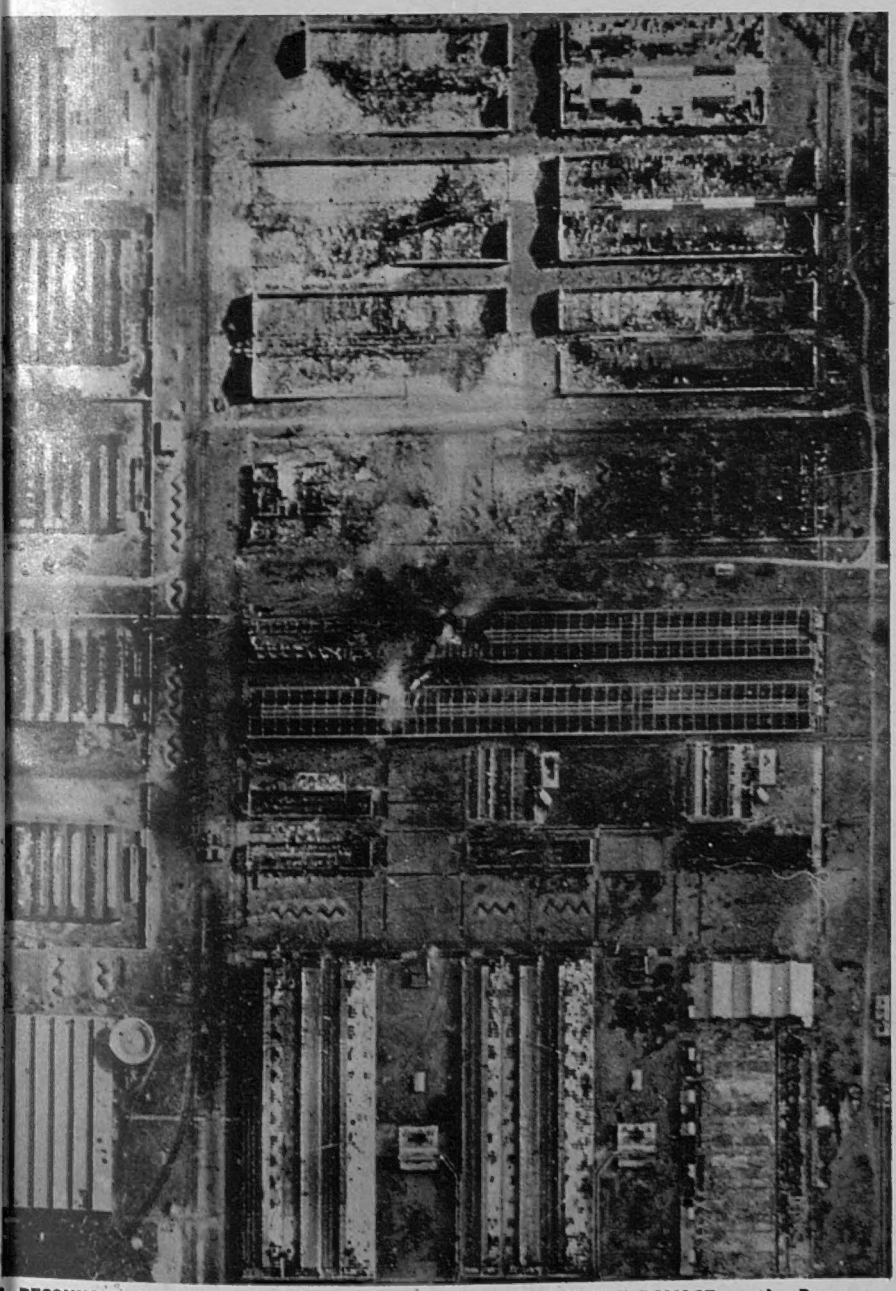
DAMAGED FACTORIES IN SCHAFFHAUSEN after the "trag bombing." Appropriate reparations will be made by t United States Government, said Mr. Cordell Hull

THE R.A.F. ATTACK A FRENCH EXPLOSIVES FACTORY NEAR BORDEAUX: A scene from a film made whilst the works at Bergerac were actually being bombed. It shows a flare falling towards the target whilst fires caused by previous bombs are still burning amongst the buildings on the ground

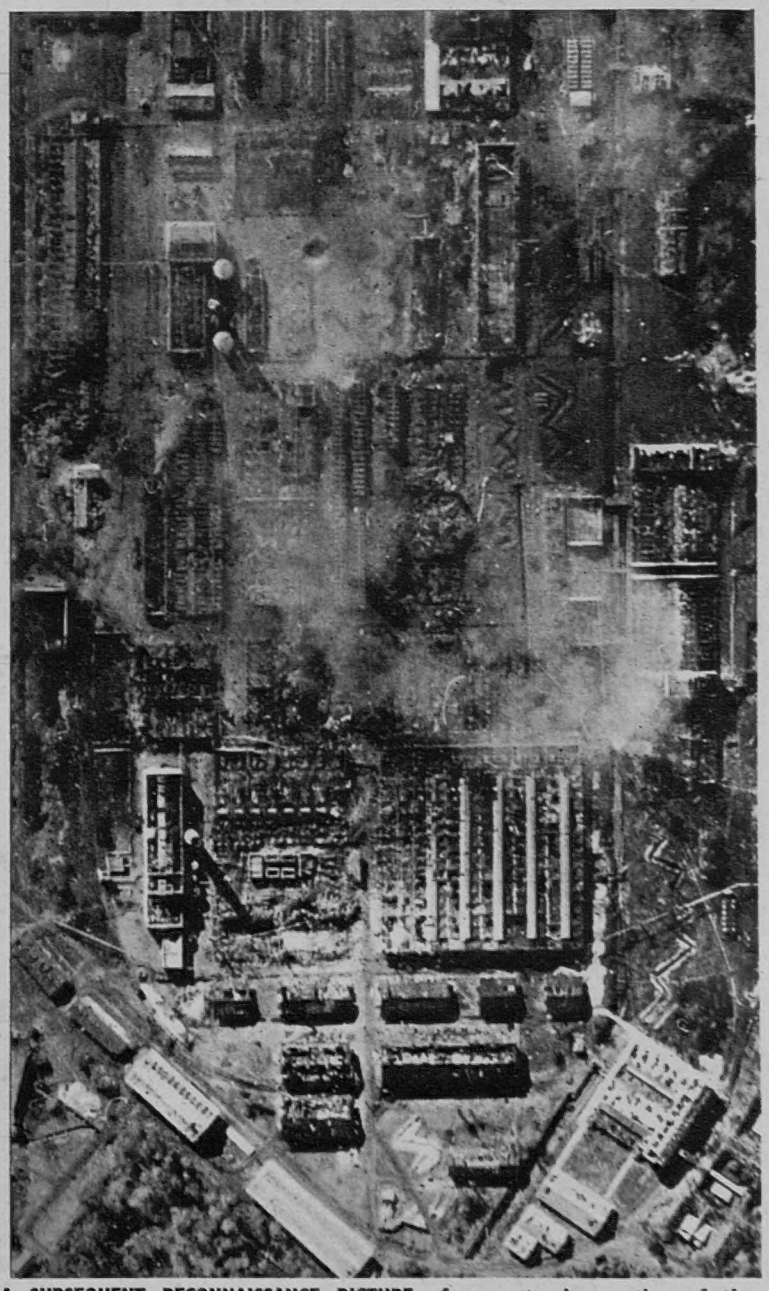


A REMARKABLE NIGHT PHOTOGRAPH TAKEN FROM ONE OF THE HEAVY BOMBERS during the attack on the Poudrerie Nationale at Angouleme. The plant, on a bend of the River Charente, is illuminated clearly in the light of a powerful flash-bomb, and a dense pillar of smoke (right centre) marks the point of explosion of a heavy bomb

Lancasters attacked a French explosives factory on the night of March 20-21—the important Poudrerie Nationale works at Angouleme, some 60 miles north-east of Bordeaux. This factory is one of the French State explosive plants which are known to be working for the enemy. A second one is the factory at Bergerac, also a few miles east of Bordeaux, which was attacked on the night of March 18-19. Reconnaissance since then has shown that this attack did great damage. One nitration house was almost completely destroyed and the roof of two others seriously damaged. Among the powder works and storage houses, two buildings were destroyed and sixteen were almost destroyed or very badly damaged. In the acid recovery plant, two buildings were burnt out. Elsewhere in the target area four large unidentified buildings have been demolished, two others severely damaged and eight of medium size either destroyed by high-explosive bombs or burnt out. The Poudrerie Nationale factory at Angouleme made nitrocellulose, used in the manufacture of powder, and employed some 2,000 workers. The main works-buildings, nearly half-a-mile long, formed the main part of the target



A RECONNAISSANCE PHOTOGRAPH SHOWING SOME OF THE SEVERE DAMAGE to the Bergerac powder works. Here, as at Angouleme, buildings destroyed, or extensively damaged, include nitration houses, acid plants, pulping and drying houses, and other workshops



A SUBSEQUENT RECONNAISSANCE PICTURE of an extensive section of the Angouleme powder-factory buildings, including nitration houses, boiling and washing houses, pulping houses, and other important sections

b

AROUND the BATTLEFRONTS of the WORLD

Recent Pictures Taken in Many Different Fighting Areas

THE FIFTH ARMY'S "CIRCUS"—an experiment in front-line entertainment in Italy: On the main fighting front around Cassino is a group of tents under the control of E.F.I. known as the "Circus." Here the front-line troops can relax and enjoy themselves during their rest periods. In the "Circus" are a barber's shop, a games tent, a rest tent and a restaurant. There are twenty-two tents in all, with a staff of two officers, two sergeants, six corporals and twenty Italian helpers. All the furniture has been supplied locally, and electric light is supplied by two petrol lighting sets. During the period February 26 to March 18, 1944, 40,000 troops were entertained; 10,000 cakes and 120 gallons of tea are sold daily. If this entertainment centre continues to prove a success it is proposed to open five more such camps. The picture above was taken in the barber's tent

AN EIGHTEEN-YEAR-OLD PRISONER IS CAPTURED: Lance-Corporal G. Hudson (on the left) is bringing out a new German prisoner from a P.O.W. enclosure. This German is 5 ft. tall, eighteen years of age, and had been in the Army for five months. He was only on the Anzio front for two days before being captured. He seemed to be proud of the fact that "the only man he had killed was a Dutchman, stabbed with a bayonet during a drunken brawl in Occupied Holland"

WHAT ONE MARSHALL ISLAND LOOKED LIKE after the American assault on the Central Pacific stronghold of the Japs. Flying sometimes as low as 50 ft. above the ground, Mitchell bombers of the U.S. Seventh Air Force pounded this Marshall islet in a surprise raid which caught the anti-aircraft gunners unprepared. The bombers had come and gone before the A.-A. defence could go into action. This one islet was plastered with 800,000 lb. of bombs. Note the skeletons of burned-out hangars and workshops

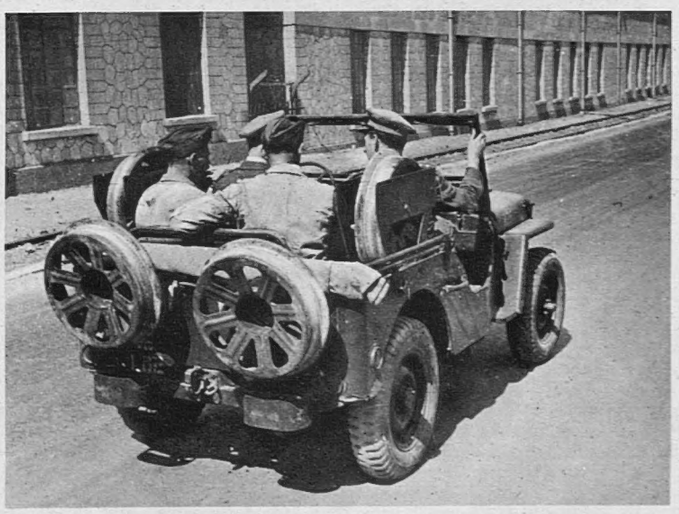
A FAMOUS FRENCH ACTRESS VISITS THE HOME FLEET: Madame Francoise Rosay is the woman who recently escaped from France, to return to the stage in London. She has just been visiting the Fleet to give a series of dramatic recitals. This picture was taken on the deck of one of the battleships. From left to right are: Captain the Hon. Guy Russell, Madame Primuz (who managed the tour), Madame Rosay and Admiral Sir Bruce Fraser, Commander-in-Chief

JAP PLANES BURN IN THE MARIANNES ISLANDS, IN THE PACIFIC: These aircraft were "caught" sitting" on their home field at Saipan Island when the Americans made a heavy attack on February 25. The U.S. planes which took part flew from aircraft-carriers: they destroyed 135 Jap aircraft—87 on the ground, 34 in combat and 14 by warships' anti-aircraft fire. Only six American planes were lost

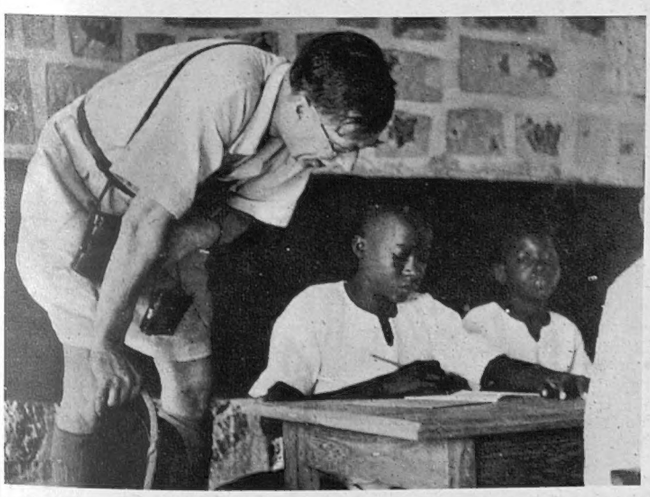
THE SWORD OF HONOUR PRESENTED TO LORD GORT, V.C., BY THE PEOPLE OF MALTA. Leaving his car, Lord Gort walks with Professor Farrugia through crowds of cheering islanders towards the dais where the presentation was made at Zebbuge

LORD GORT SPEAKS AFTER THE PRESENTATION, holding in his hands the Sword of Honour which he has just received : In the Maltese village of Zebbuge, the Maltese people paid tribute to the Governor of the island, Lord Gort, for his splendid example during the siege of Malta. All the towns and villages were represented when the ceremony took place and a large crowd was present. The Sword was inscribed : "Presented by the Band and Allied Clubs in Malta and Ghawdex, interpreters of the People's admiration, gratitude, devotion and love to H.E. Field-Marshal the Viscount Gort, V.C., their great leader and Governor during the Second Siege of Malta"

THE JEEP HAS NOW TAKEN TO THE RAILWAY : How it operates on the track with solid steel wheels in place of the normal rubber tyres—a scene at a Middle East level-crossing



THE NEW JEEP ON THE ROAD, showing the rail wheels in position on their specially attached brackets. The jeep, famous for its ability to go almost anywhere, has now been adapted for railway work. It can be driven off the road and, by a quick interchange of wheels, used as a railway trolley-car. Another quick change, and it can be back on the road. The jeep shows the same form on the steel track as when it is taking a water plunge or manipulating an almost impossible mountain track. This ingenious adaptation is the work of Major H. G. A. Mauldin, an officer in the Royal Engineers who was formerly in charge of an L.N.E.R. locomotive shed at Stockton. The jeep road-rail car will be used for line inspection and reconnaissance work



PROFESSOR JULIAN HUXLEY IN WEST AFRICA TO DISCUSS EDUCATION PROBLEMS. Professor Huxley is a member of the Elliott Commission on Higher Education in British West Africa. This body is going about its work in a very determined manner : so far, it has covered Nigeria and the Gold Coast up to the Northern Territories ; its members have talked to every section of the communities concerned. During their visit to the Northern Territories, the Commission inspected a Native Administration School built from the funds of the native Treasury. Here Professor Huxley leans over the shoulder of one of the pupils to inspect his work

THE NEW ARGENTINE PRESIDENT : General Edelmiro J. Farrell (on the left), who assumed the office of President of Argentina on March 10, following the formal resignation of President Pedro Ramirez. Farrell had been the Acting President, but he was, in fact, the virtual dictator of the country. He is thought to have definite leanings towards the Nazis

FACT and FANCY about the GUERILLAS

An Assessment of the Resistance Movements and Organised Partisan Bodies in the German-occupied Territories

Described by FERDINAND TUOHY

RUSSIAN knocking at the Carpathians has invested the guerilla movements on the Continent with a new and quickened interest. It should not be very long before we know to what extent half-a-dozen States are willing or able to respond to Allied, particularly Soviet, calls for action against the Germans. We seem to be entering a phase when some of the uncertainties and divergencies of opinion concerning guerillas are likely to be clarified.

While all are agreed that guerilla bands can seriously interfere with the enemy's communications, and that they are frequently so placed as to acquire valuable information, a conflict of opinion exists regarding their potential influence on high-powered military campaigns save in special topographical conditions. How far should the effort and the risk be carried in respect of arming guerillas, not so much the risk to the "gun-runners" as the risk of anarchy, and even more so of Nazi vengeance on innocent people, like those of Ledice?

There is little doubt that the Russian case has been a misleading source. For more than two years the Red Command has been in organised touch with a great number of partisans in another part of Russia, where the cut-off ones have been able to hide in endless forests—significantly called guerilla forests. Parachute and other contact has been at its least difficult in the wide, open spaces, with the result that "the second Red Army" (*vide Soviet War News Weekly*) has been consistently directed, armed and supplied. The temper has also been there, unexcelled of its kind.

The great value of the Russian partisans, time and again lauded by Stalin, is reflected in the Soviet Command's estimate that not less than 600,000 German troops, S.S. men, and police and gendarmerie have had to be earmarked to tackle the guerillas in the Baltic Republics, White Russia and the Ukraine.

A second outstanding guerilla success has been that of Marshal Tito. Yet it must be borne in mind that this brave soul has had two strokes of fortune, even three, which other partisan leaders cannot hope to have vouchsafed them in like measure. Firstly, Tito has all along been situated in ideal mountain country, where secret concentrations have been possible. Secondly, he inherited great masses of equipment from the disintegrating Italians, and even the strength of two or three additional divisions. Thirdly, the Allies have been able to reach him with comparative ease by sea and air, the Churchill family aiding.

Statistics composed about guerillas one takes with a pinch of salt. When Tito's men, with their red stars and small black caps, broke the sixth German offensive said to have been directed against them, their total was given as 250,000, the most diversified army since the Spanish Civil War. Since then, the Marshal has acted like a magnet on other Balkan countries, on North-East Italy, on men quitting the Nazi war machine. Whatever its present total, this guerilla army has earned its place in war history, and there it is to-day, steeled, matured, waiting to join Koniev or Alexander, or whoever comes along first.

It is no easy matter to determine which is the next most promising partisan movement, or *maquis*, to use a word destined to keep its niche.

The Polish? Some grandiose figures have been publicised. The Minister of the Interior said in London recently that it is organised in two main groups of "special detachments" and "reserve units." The former, for which a total of 250,000 is given, do sabotage and engage in armed activity against the occupation forces. But when one is further told that these forces comprise six S.S. divisions, 50,000 police, and the equivalent of fifteen army divisions, to which must be added an even larger number of divisions held in reserve for the front, one wonders what sort of attacks can be mounted, especially in view of the fact that the "reserve units" do not participate, but await the signal for a general rising.

Meanwhile, London's Polish Ministers have ordered the "specials" to contact the Red Army, which reports an initial meeting—with the Polish Commander at Revno. But news out of Poland being what it is, covered by a deep haze, it is impossible to form a reliable appreciation of the Polish Underground, its hitherto activities and future intentions. Part of it has worked in with the Red Army of its own volition. One is forced to ask how can the remainder—the great majority, apparently—come by adequate quantities of the four essentials, weapons, clothing, foodstuffs and medical supplies, except from the Soviet Command? Who else is going to overrun Poland in time to arm this immense partisan army (on paper) so that it may pull its weight in this war?

We shall be wiser any day with respect to guerilla possibilities in Czechoslovakia. There has been more than one general summons to arms, from London, and quite a number of urgent calls from Moscow. But the Czechs have not responded as wished, and one can at least see their point of view. Why risk massacre, and massacre it would be by Heydrich's successor, until one is absolutely certain that friends are about to lift the latch, and entering, stop all killing in progress or scheduled?

It would be all wrong to judge one guerilla force by another. What the Czechs have not done, the Italian partisans in Northern Italy are doing. But that is because they have to, being on the run, like so many other partisans in other latitudes. The Italians operate in five main groupings: west of Turin, around Como and Varese, between Genoa and Savona, on the Izonzo near the Carinthian border, and in the Bologna region of the Northern Apennines. Here the bands are putting Garibaldi's rules into action: close liaison with the inhabitants, tactical use of the mountains and the hours of darkness, swift marches by squads of five or ten men, and lightning concentration on small objectives.

But the liaison with the population should endanger the latter to a minimum, and posters have gone up telling the locals not to show enthusiasm for the partisans in order not to give the Germans excuse for savage repression. The Italian guerillas may be worth watching.

The *mot d'ordre* for the French maquis seems to be "send them enough of the right weapons so that they can defend themselves while assailing industrial objectives and communications." Phantoms of the maquis operate in the crowded factory areas, whereas groups of from 20 to 500 hold out in wild, hilly regions, making foraging sorties and to "do justice" as well as sabotage. It is a high tribute to local populations—especially the women—that they remain strong for the hunted young men, despite all the misery their exploits entail. Although Vichy's statement that they do five times as much damage to the State Railways as do Allied bombers, may be an attempt to lead the latter away from yards and loco-busting.

What extensions of the maquis may eventuate should France be invaded is not discussed among Frenchmen. Just now the Germans and Vichy's Militia are trying to starve out the groups on the Russian razing system. As for Resistance reserve awaiting invasion before coming into the open, the Germans hope to cope with them all by mammoth zero hour round-ups—as of 300,000 Paris men booked for the Luxembourg Gardens. And, by the way, while on the subject, three types inspire and direct Resistance: workingmen, the intelligentsia, and poets—"men of vision." In that order. The only other guerillas existing as such in the north are in the Belgian Ardennes. Norway, Denmark and Holland have not bred the type, partly, no doubt, because of obstacles of nature or of population density. But sabotage is done. At the other end of Europe many thousands of the Greek Elas movement, whose spearhead men are called Andartes, are eluding the Germans and constantly attacking important communications. Olympus and Parnassus are their main areas, and they are in touch with Albanian guerillas, well-armed and in their element, and, by latest accounts, not in favour of a resumption of the pre-war regime.

Few guerillas are, and that is one of the problems to be faced in shattered Europe. But it is incorrect to say that all are Communists. Although it is obvious that the Red Army, as it thrusts forward on the spot, will collect ever-growing adherents.

IN THE BALKANS: A camouflaged German tank moving up to the "Partisan war zone" in Bosnia has just been hit by rifle bullets fired from an ambush. The officer standing up in the cupola gives the alarm, and out jump the tank crew to meet the unseen attackers

A GERMAN WARNING SIGN outside the village of Resochnoye, near Orel. Printed in both Russian and German, it says: "Attention! Danger of Guerillas! It is strictly forbidden for civilians as well as military personnel to walk in the area west of the Karachev-Resseta road. Whoever appears in the forbidden zone will be shot—Local Commandant's Office"

RUSSIAN GUERILLAS MEET RED ARMY SCOUTS—a picture taken during the rapid advance of the Russians of the past few weeks

A SOVIET WOMAN PARACHUTIST, who had been dropped behind the German lines, has been captured by the enemy and is now on her way to be interrogated

LAVA FROM THE ERUPTING VOLCANO ENGULFS THE HILLSIDE VILLAGES: An impressive aerial picture of the village of San Sebastiano, showing houses with their walls pushed over, and some with only the chimneys showing, engulfed in the smoking stream. The molten lava lies beneath this mass: every few moments the movement of the stream forces rocks and debris aside and the lava then streams forth and gains a few more yards in its destructive journey

More About the Great VESUVIUS ERUPTION

The first intimation that the famous volcano was in eruption came on March 20. It was then announced that three streams of lava were flowing from the peak—one to the south; another to the south-west; and a third to the north. The village of Boscotrecaso was especially threatened by a stream a quarter of a mile wide and 7 ft. high. Then came details of a much bigger lava stream pouring down from the peak by way of the Valle del Inferno,

HOW THE LAVA FLOWS DOWN, pushing everything in its path before it and burying the houses and trees

THE TRIPLE FLOW OF LAVA FROM THE CRATER OF VESUVIUS, and the paths they pursued down the mountain towards the plains. The volcano is here seen by night from the direction of Naples—*Drawing by Percy Home*

immediately threatening the villages of San Sebastiano and Massa di Somma. At night, a brilliantly flaming stream 30 ft. high and two yards wide forced its way past intervening walls and houses on to the eastern portion of the villages. Both villages were evacuated.

As time passed, it was noticed that the main northern flow was keeping within the worn channel of the 1892 lava discharge, but the progress of the lava wave was still moving at a rate of 3 miles an hour. On the 22nd it was announced that more of San Sebastiano had been crushed under 50 ft. of lava. On the 23rd we were told that half the village had disappeared. The girder bridge connecting with Massa di Somma had been "broken like match-boarding." On the 25th signs of a cessation of the eruption were mentioned, but the cone still glowed orange-crimson and the glare from the summit was not reassuring. Repeated earthquake shocks were felt in Naples, and the people went about with umbrellas to shield themselves from the falling ash

YUGOSLAVIA'S FIGHT FOR FREEDOM

The Struggle of the Patriot Guerrillas Against the Occupying German Divisions

TO understand what is going on in Yugoslavia, and to appreciate the peculiar difficulties and character of the fighting, one must know something of the country and its peoples. Yugoslavia has an area, roughly speaking, one-third larger than that of England and Wales and an estimated population of 15,250,000, compared with the 41,500,000 of England and Wales. The kingdom, as it emerged after the final results of the Peace Treaties with Austria, Hungary and Bulgaria, consisted of what was formerly known as Serbia, Slavonia, Croatia, Bosnia, Herzegovina and Montenegro. An assembly of small nations, each having its own traditions, customs and individual outlook upon life.

The majority of the inhabitants are peasants and agriculturists, and there are comparatively few industrial occupations. They are good and elusive fighters, as their past history has frequently demonstrated.

Well-led, and using tactics admirably suited to the natural characteristics of their country, they have already put up a stiff resistance.

All save the comparatively few major roads are bad, when considered in the light of their suitability for modern war transport purposes. Indeed, the greater mileage of roads, in most parts of the areas where the hardest fighting is taking place, consist of little more than rough narrow tracks. Railways are few and far between, though some 900 miles of main lines—often single tracks, however—run through territory where, in Bosnia, Tito's forces have been, and are still, chiefly operating. And his guerrilla troops have concentrated upon these roads and lines with a view to cutting the Nazi communications. The terrain covered by some of the lines in mountainous districts does not encourage the construction of

WHERE THE PATRIOTS HAVE BEEN COMPELLING THE GERMAN DIVISIONS TO OPERATE: The mountain areas, which make access difficult to the Danubian plains. The whole of Western Yugoslavia is a mass of limestone mountains and hills which come down to the sea as giant scrub-covered cliffs. At Kotor (Cattaro) this cliff frontier is spectacular in its abruptness. The bases of the cliffs plunge deeply into the sea. Only at one or two isolated spots do the mountains recede, giving space for a town, as at Split (Spalato). Otherwise, the shore cliffs lead only into the higher mountain territory of the Dinaric Alps. The whole district is known as the Karst

KEY MAP OF PLACES BOMBED AND BOMBARDED BY THE ALLIES. Many of them have recently been visited by Coastal Command and other aircraft: railway communications have been bombed and troop trains attacked. Islands have been bombarded by British destroyers

HOW THE ALLIED BOMBERS ARE HARASSING THE GERMANS IN YUGOSLAVIA AND AIDING THE PATRIOT BANDS. Coastal Command aircraft attack an enemy troop train at an awkward point on the railway near Metkovitch, between Ragusa and Mostar—*Drawing by H. P. Burton*

One of the most successful of the Allied attacks on targets within Yugoslavia was the straffing of a troop movement by the Germans just south of Metkovitch, the once-busy Adriatic port. Five trainloads of soldiers were moving down on the single line railway from Metkovitch towards Ragusa when aircraft of Coastal Command caught sight of them. Bombs were quickly sent down and three out of the five trains were hit and brought to a standstill. The trains caught fire and German troops were seen dashing from the carriages to nearby cover. The district in which this successful attack occurred lies in the old Dalmatian province. Metkovitch itself is served by the railway which comes down from Mostar and Sarajevo, which is linked with the north and east. Southwards, the railway proceeds to the romantic port of Dubrovnik (or Ragusa, as it was known before the general renaming of Balkan towns). The rail follows the valley of the Narenta to the swift-flowing stream which comes down from the hills beyond Mostar

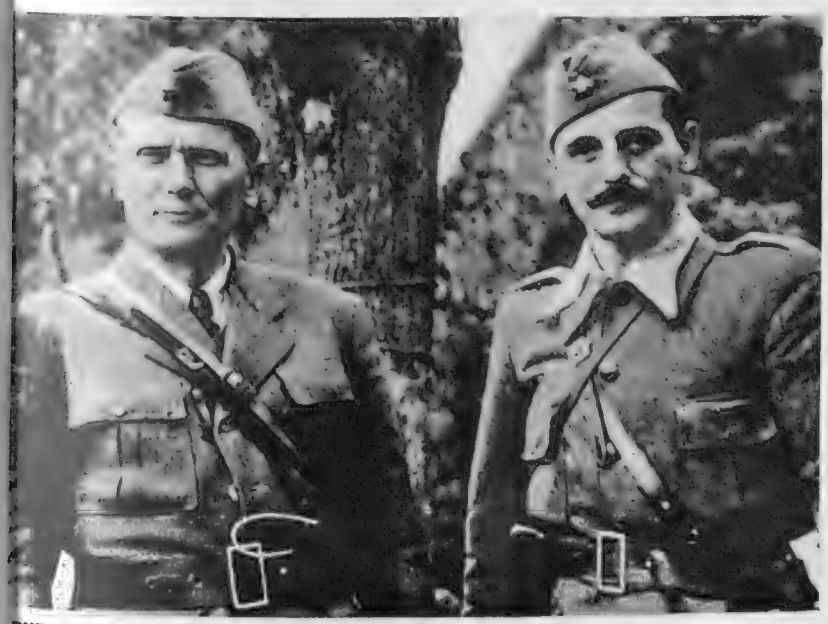
MOSTAR, THE SEMI-ORIENTAL TOWN ON THE NARENTA RIVER, OCCUPIED BY THE GERMANS, IS BOMBED BY ALLIED AIRCRAFT. The town is situated in what was once Herzegovina: it is only one of many such towns to be attacked from the air—*Drawing by H. P. Burton*

Allied planes have been bombing various positions in Yugoslavia which are in active German occupation. One of them is Mostar, a point on the Sarajevo-Dubrovnik (Ragusa) railway. Coming southwards from the former important place, the narrow gauge railway continues alongside the Narenta River, climbing up to a height of some 4,000 ft. The line twists and turns among the limestone rocks of Herzegovina in what is known as the Karst country, and finally it brings one to the picturesque semi-oriental town of Mostar. It is not so crowded with Muhammadan mosques as Sarajevo, but its minarets are numerous enough to give it an Oriental air. The river here flows between two masses of rock, on one of which are the remains of an ancient castle said to be connected with the Emperor of the East, Constantine Porphyrogenitus, a name not unknown to classical literature. A notable feature of the place is the ancient bridge of one single span which crosses the Narenta. It is a footbridge of undoubtedly ancient construction, which was at one time thought to be Roman: later opinion inclines to the belief that it is Turkish. The span is 95 ft. in length

supplementary lines. This is the case with the railway between Mostar and Sarajevo and others beyond. The line passes through numerous tunnels cut in the solid rock of the mountain-sides, and in other cases simply clings to the face of these, with a rushing torrent like the Narenta boiling far below on its way to the sea. Indeed, the Valley of the Narenta could be held by a handful of really well-armed men against a division.

The policy of the Germans, at least in the early days of the struggle, did not envisage a coming to grips with the forces of Mihailovitch and Tito, but aimed rather at cutting off their communications with the outer world. In pursuit of this policy, they occupied several of the larger islands along the Dalmatian coast, lest the Allies should endeavour and be able to get communication with the Yugoslav forces across the Adriatic, and by this means land armament and other supplies.

Similar tactics have been followed by the Yugoslav leaders. Their guerilla forces have over and over again cut the communications likely to be of most service to the invaders, but have astutely left the narrower and rougher roads still available, along which they themselves have been able to operate successfully.



THE LEADER OF THE YUGOSLAVIAN PARTISAN FORCES: Marshal Josip Broz (on left), better known as "Tito": with him is thirty-three-year-old Major-General Koca Popovic, Commander of the Partisan First Army Corps. Popovic, a former Belgrade writer, is a veteran of the Spanish Civil War, in which he served for two years during the Civil War with the Republican forces

YUGOSLAVIAN WOMEN PREPARE FOR GUERILLA WARFARE IN ITALY: These fighting women are already veterans of the Partisan war against the Germans. Many of them were wounded in the Yugoslavian fighting and were sent back to Italy to recuperate. They are now ready to return to Marshal Tito's forces on the fighting front

HOW THE JAPANESE HAVE THRUST INTO INDIA, BY COUNTER-ATTACKING ACROSS THE ASSAM BORDER TOWARDS IMPHAL. A view taken from Tiddim looking northwards to Manipur State, showing where the enemy columns have come over the mountains into the valley beyond in three (possibly four) columns—*Drawing by E. G. Lambert*

The FIGHTING AREAS in BURMA

—Special Sphere Drawings of the Imphal and Mogaung Battlegrounds

The three-pronged (or possibly four-pronged) attack upon Assam is now seen to have as its object the isolating of Imphal, the main Allied base, by cutting across all the roads which converge upon the capital city of Manipur. The forces which branched off towards the Tiddim road, where the usual tactics were followed of placing road blocks, have not made much progress. The British formed themselves into the defensive "box" system, so successful in Arakan, and have held off the enemy, while being supplied from the air. They have since taken the offensive and have seized some Japanese positions.

In the Tamu area, where the second enemy prong was operating, the Allies have held their ground, and have been harassing the enemy with mobile columns. The attacks made by the Japs have been driven off, so that the effort to reach across to the south of Imphal plain has not yet been achieved.

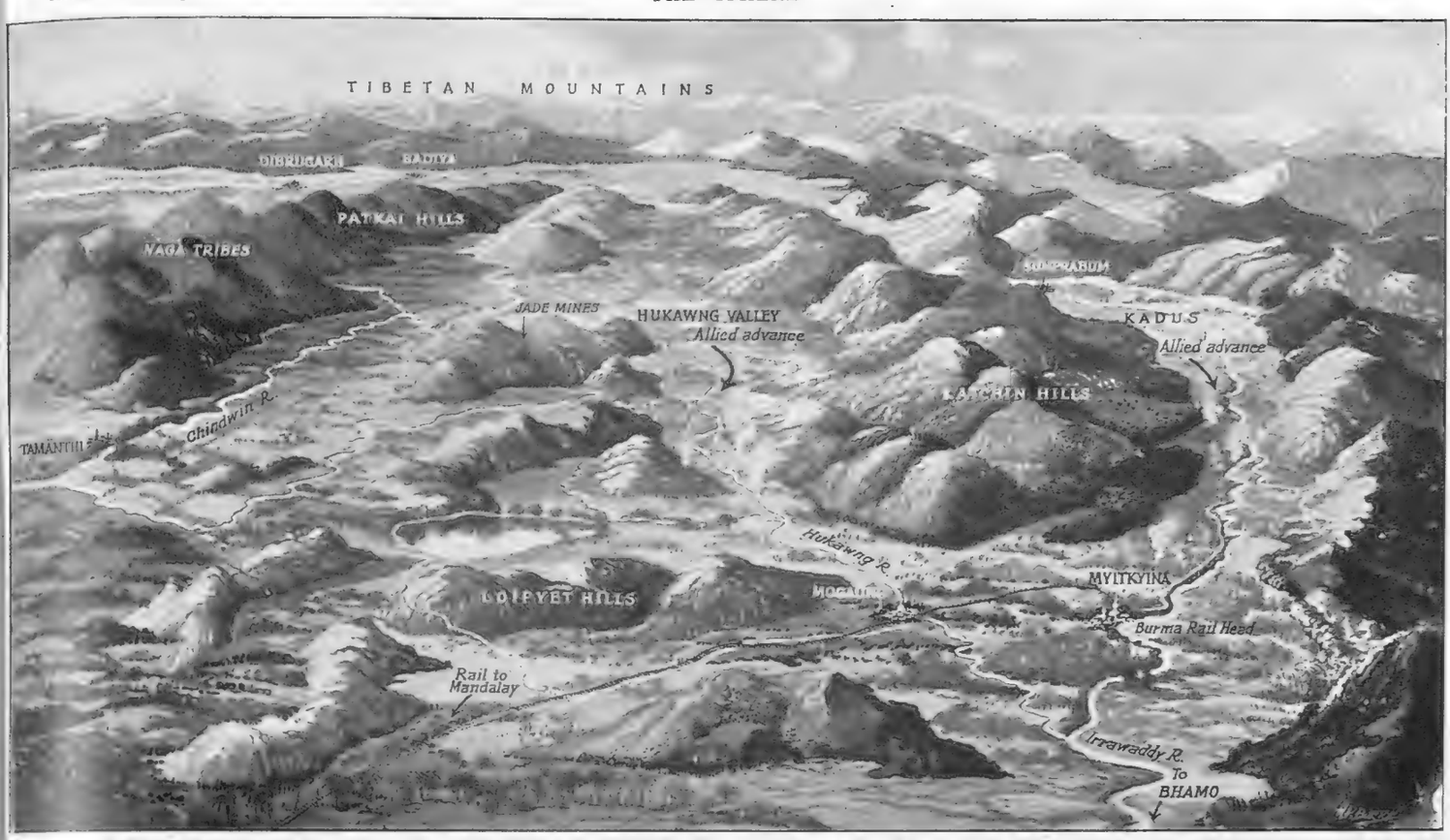
In the north, however, the Japanese have had some success, and are threatening to cut the road north of Imphal. The two columns which crossed the Somra hills and reached the area of Ukhrul, 30 miles north-east of Imphal, inflicted a reverse upon the Allied forces after very severe fighting. The enemy has suffered heavy casualties—over 2,500 dead, apart from the unknown results of the constant dive-bombing, machine-gunning and bombing of lines of communication.

A STRATEGIC KEY MAP OF BURMA, showing the four basic points and the enemy's main bases at Chiengmai and Bangkok: This map shows some of the strategic distances separating basic points in the Burmese military situation. Dibrugarh is separated from Chittagong by 425 miles, a distance which is almost identical with that separating Chiengmai from Bangkok. The former railhead was constructed by Japanese engineers years ago in a district which did not seem to warrant any peacetime development. Dibrugarh, which lies behind the northern Burmese operations, is separated from Chittagong (which feeds the Arakan and lower Burma operations) by 425 miles of rail. As the crow flies, the distance to Bangkok, south-westerly enemy base, is 830 miles; the distance from Dibrugarh to Chiengmai, northern air base of the Japanese, is 725 miles. Both lines have to cross the mighty Irrawaddy

On right—

The Japanese are using the Chindwin River as a chief highway for supplies for their thrust into the southern section of the Manipur Valley, and, possibly, for the thrust farther north, where Homalin would be a useful point for the accumulation of stores. This great stream is navigable for the greater part of its length, its broad, shining waters proceeding smoothly past jungle-fringed shores on its right bank and more open vegetation on its left, or eastern, bank. There are long reaches of this dark jungle edging, but from time to time this is broken by an uprising of rock in dramatic fashion. In this section, to the north of Kalewa, the important Japanese river base, the rocks are tabular in form. Away to the left the river flows down to Kalewa; behind are grassy stretches and paddy flats. To the right the steamers will push their way against the stream towards Kindat, which used to be a frontier outpost of British administration. Beyond were the unadministered tribes. No Englishmen lived beyond Kindat, although visits were made more or less officially to Sittaung and Homalin. Here one was close to Manipur, and the telegraph-line crossed the river and the road track led away to Tamu. Mountainous cliffs come right down to the river's edge, to add grandeur to this wondrously beautiful river.

A PRINCIPAL LINE OF COMMUNICATION FOR THE JAPS IN (ou ste
Kalewa, chief Japanese river base, lies away to the left breaking the jungle: the



THE BATTLE IN THE MOGAUNG VALLEY, where the combined American and Chinese forces under the American General Stilwell are pressing towards the Mandalay railway, by way of the Hukawng River, in the northern section of Burma—*Drawing by H. P. Burton*

The 18th Japanese Division, which was holding Northern Burma in the Myitkyina area, is now in a very dangerous position. According to the latest reports, it is facing the advance of General Stilwell's forces coming from the north, and is cut off from reinforcements and supplies by the action of the Allied airborne troops centred near Katha. A continuous battle is going on in the Mogaung Valley, whose narrowness favours the enemy, preventing the superiority of Stilwell's army from overwhelming the Japanese. On leaving the Hukawng Valley, General Stilwell had despatched Brig.-General Merril with his American forces to drive round to the eastern flank of the enemy. They captured the village of Shaduzup and held it firmly, pushing on south towards Mogaung, 40 miles distant. Another commando force of Gurkhas and Kachins is proceeding down the Mali Valley, from Sumprabum. The Kachins are a fighting hill-tribe, who make excellent troops under British command. The British force which crossed the Chindwin a few weeks ago, and of which nothing further was heard, has now joined up with Stilwell's troops. The men had marched for 200 miles, across mountains and through jungles, surviving all the many difficulties. They were all trained by Major-General Wingate, who led the jungle expedition into Burma last year. It was announced before his death that Major-General O. C. Wingate was in command of the airborne troops stationed in the area south of Katha, between the Irrawaddy and the Schweli. He had brought forward the idea at the Quebec Conference last year, and had later on worked out the full scheme in co-operation with Colonel Philip Cochran, of the United States Army. The airborne troops have been busily engaged in blocking all the Japanese lines of communication to the north. They have blocked the only railway line to Myitkyina, and have also blocked the road and the river passage up the Irrawaddy. The pilots cut the telegraph-wires by trailing long cables to which hooked knives were attached

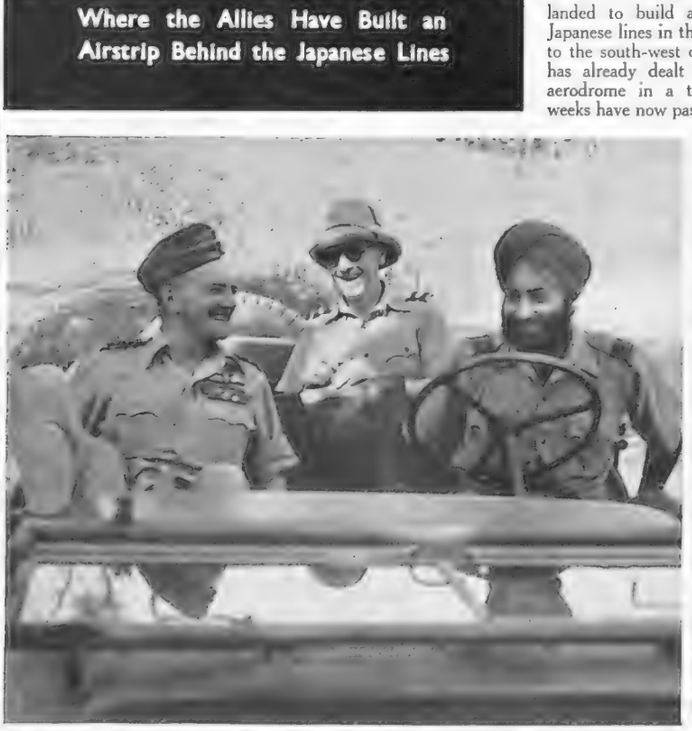
IN THEIR THRUST TOWARDS INDIA—THE RIVER CHINDWIN, ALONG AND ACROSS WHICH THEY ARE NOW FERRYING THEIR WAR SUPPLIES. In this drawing, (out of the picture); away to the right (also out of the picture) lie the towns of Sittaung and Homalin. The Chindwin is a beautiful river, with rocky cliffs steamers used by the Japs are paddle-boats, usually camouflaged with branches of trees (*See notes at left*)—*Drawing by E. G. Lamber*

IN THE BURMA JUNGLE

Where the Allies Have Built an Airstrip Behind the Japanese Lines

AFTER THE AIRBORNE LANDINGS IN THE BURMESE JUNGLE, WHERE THE ALLIED TROOPS HAVE BEEN JAP LINES. Supplies and reinforcements have been coming in, and the troops have been out cutting raids by the Japs, small planes have been bringing in the wounded from the forward

It is now known that the position of the Allied troops landed to build an airstrip and strong-point behind the Japanese lines in the Burma jungle is in the region of Katha, to the south-west of Mogaung and Myitkina. THE SPHERE has already dealt with the formation of this remarkable aerodrome in a two-mile clearing in the jungle. Some weeks have now passed and the place has become established. Raiding expeditions set out from it and cut the enemy's communications whenever and wherever this is possible. Columns marching overland are said to have joined up with the forces landed by air. The Japanese, of course, only became aware of these activities after a lapse of time: when they had discovered the location of the airstrip they began to send out aircraft to disrupt the Allied effort. The air



AIR MARSHAL SIR JOHN BALDWIN, who commands the Tactical Air Force in Burma, with Air Commodore A. Gray, about to inspect an airfield in the jungle. Squadron Leader Mehar Singh, who commands a fighter squadron, is at the wheel

A VULTEE VENGEANCE DIVE-BOMBER returns to a forward airfield after a successful sortie against Japanese positions. A squadron equipped with this type of aircraft has, at the moment, the best serviceability record of any operational squadron in the Burmese theatre of war

CONSOLIDATING THEIR POSITIONS BEHIND THE LINES *Drawing by Roland Davies*

the enemy's communications. Despite bombing and ground defences immediately came into play, and the troops on the ground now take to their specially constructed dug-outs as soon as an attack materialises. In the above drawing an early morning breakfast has been disturbed by an air-raid alarm. Small planes have just landed bringing in serious casualties from the jungle

A TANK BATTLE IN PROGRESS : During recent operations in the Arakan area, Allied tanks went into action. This picture was taken just as the fighting vehicles joined in the battle against the Japanese : smoke from the guns rises beyond the trees where the Japs are entrenched

THE JAPS ARE LOCATED AMIDST THE SMOKE IN THE BACKGROUND and are returning the fire of the Allied tanks. In the foreground is one of the jungle tracks which serve as a road in this very difficult theatre of war. The scene is the Arakan region of Burma

DURING THE ACTION OF THE 7TH DIVISION, which was cut off by the Japanese in the Ngayedauk Pass area but which fought its way out. The victory was not achieved without cost, however, as this scene of wounded men clustered around the Red Cross ambulances demonstrates

AN AMBULANCE CONVOY BRINGING WOUNDED FROM THE 7TH DIVISION after it had been relieved in the Ngayedauk Pass. The rough nature of the jungle roads is here vividly shown : numbers of vehicles have run off the track and been wrecked at this spot

The MINESWEEPERS and the TUGS

The Navy's Little Ships, which have Performed Wonders All Over the World During the Present War

Special Sphere Drawings

THE LITTLE SHIPS WHICH CLEAR THE SEAWAYS FOR THE BIG SHIPS: THE TINY MINESWEEPER OF SOME 540 TONS IS PASSED BY ONE OF THE OCEAN GREYHOUNDS OF 35,000 TONS, for whom she has swept a mine-free channel to port—*Drawing by Montague Dawson*

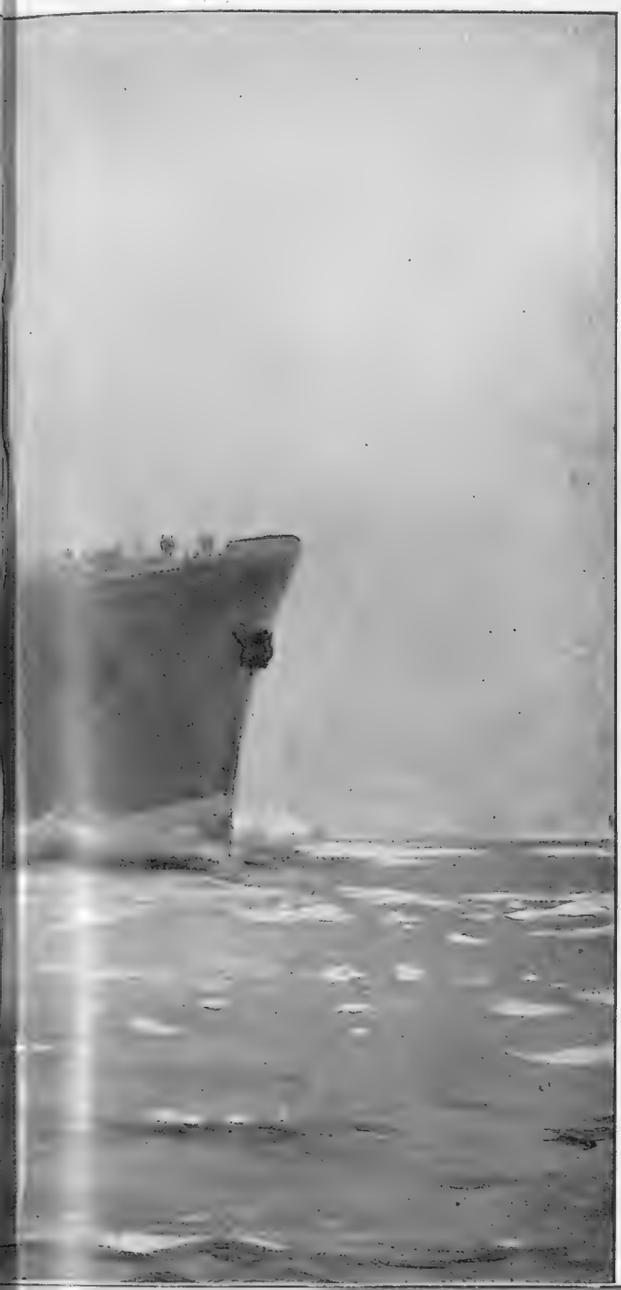
Whenever the Prime Minister surveys the war situation—either to the House of Commons or to the nation in general—he does not forget to draw attention to the day-to-day work of His Majesty's Navy, those ceaseless operations which, because they have no immediate targets, must pass without any public recognition. Especially does Mr. Churchill not fail to remember the work of the little ships, the minesweepers, which every day adventure out on to the storm-swept waters which encircle this realm.

In his latest address to the House, Mr. Churchill called the attention of Members to the indomitable minesweepers in the following terms: " . . . There was the mining peril, the sea-mining peril, which loomed so large in 1939, and which has been mastered by superior science and ingenuity, and by the often forgotten but almost unsurpassed devotion to duty of our minesweeper crews and the thousand ships they work and man that we may eat and live, and thus fight for the good cause. . . ."

A large number of the minesweepers are peacetime trawlers, converted to their present use by the addition of a number of anti-aircraft guns, the quality of which has steadily increased as opportunity has offered. The members of the minesweeper crews who man these guns have become remarkably accurate snap-shooters, and recently they have brought down many dive-bombing aircraft of the enemy; but the casualty lists show that, many a time, the fates have been against the minesweeper and that she has failed to make port.

In the Royal Navy to-day there are many types of minesweeper: the majority of the more modern vessels are bigger than the tiny one depicted above. Some of them have been built in Canada since the outbreak of the present war, and they have proved exceedingly useful, both for minesweeping and for anti-submarine escort duties

AN OCEAN-GOING RESCUE TUG, THE "GROWLER." This is one of a class of vessels of which the Royal Navy now possess a number: they are doing useful work in many theatres of war. Some of them are as large as 1,400 tons, others displace only 700 or 800 tons. "Growler" is Diesel-engined, and she has an endurance of over fifty days



NEW AMERICAN CRUISERS HAVE A "SHAKEDOWN" RUN before being commissioned for active service. According to U.S. Navy regulations, the crew's bedding must be aired weekly: here it is exhibited on the starboard side of a new cruiser during her "shakedown" run. It is during this trial voyage that many of the American seamen get their sea-legs and become acquainted with battle conditions aboard the new fighting ship

***Below*—THE NAVAL RESCUE TUG "RESTIVE" CUTS HER TOW when the burning vessel she was trying to salvage turned over and later sank—an incident during the work of the Royal Navy in the Mediterranean**—*Drawing by Wm. McDowell*

For two hours the Rescue Tug *Restive* towed a burning ship, alongside which a salvage vessel had been made fast to fight the fire. Later, when the salvage ship was compelled to cast off, *Restive* continued towing for nine hours, but eventually had to chop the hawser when the damaged ship turned over and sank. In six months, *Restive* has salvaged thousands of tons of shipping in the Mediterranean. The incident depicted in the drawing below occurred when she went to the aid of a 15,000-ton ship which had been torpedoed and was on fire.

"We came alongside and started to pump extinguisher foam into the ship," said Lieut. English, the former commander. "I went on the bridge to assist her captain to direct operations. The flames took a firmer grip and the captain ordered 'abandon ship.' We got all the ship's company safely on the tug, and returned to take the burning ship in tow. As we proceeded at 5 knots, another salvage vessel made fast alongside and continued to fight the flames. But after two hours she had to give up and break adrift. We continued towing, but after nine hours the ship turned over and we had to chop the towing hawser."

An axe is always kept ready for such an emergency as this. In the foreground of the drawing is seen the large towing-hook fitted in all tugs, which usually has a shock-absorbing device to prevent a sudden "snatch" breaking the tow-line

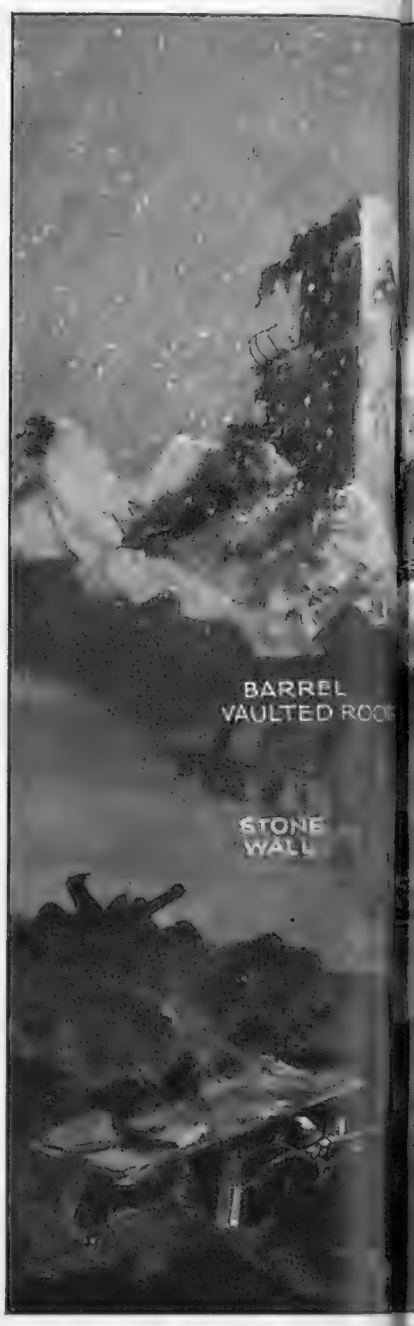
The DESPERATE NATURE of the FIGHTING in the TOWN of CASSINO

Where the Germans Held Out during the Terrific Bombing and Bombardment in the Cellars and Underground Passages—*Special Sphere Diagrammatic Drawings*

"INTENSELY HEAVY RAIN," one of the three main factors in slowing up the attack on Cassino. A typical scene on the hilly roads around the town, where the tanks were constantly slipping on the miry ground or becoming bogged—*Drawing by W. G. Whitaker*

Below—Although in certain parts of the town of Cassino itself fallen rubble had so choked the streets as to make tank advances wellnigh impossible, tank operations developed in situations where the ground was more open and a certain amount of quick movement was possible. One of these positions is here shown. It lies towards the south-west, between the railway-station and the main body of the town. The New Zealanders, who had been holding the station, managed to gain possession of a mound of ground sufficiently high to give a useful command of the frontage of the southern part of the town. Sherman tanks were not slow to avail themselves of this position. A duel with German tanks resulted, and from nearer positions the Browning guns of the Shermans enfiladed the enemy snipers

As the day of the attack upon Cassino drew in and darkness fell, rain too began to fall in torrents. How hampering this can be only those who have actually experienced such conditions can fully appreciate. After an exhausting day, the infantry try to get some short spells of physical relief; but with "rain in torrents" this is next to impossible. One correspondent met an officer just returned from the town after several hours had passed. Asked what it was like, he replied that it was "as frightful as you can possibly imagine for troops fighting in the open in rain and inky darkness against an unseen enemy who may be three or three hundred yards away." Evidently, the conditions were not dissimilar from a cloudburst in the Western Highlands. Recently, there has been a mixture of snow and slush to add to the pleasures of life in Cassino



FIGHTING IN THE DUG-OUTS, CELLARS AND cellars and passages below the grou

A HOT CORNER DURING THE FIGHTING IN THE TOWN OF CASSINO, IN WHICH THE TANKS FIGURED LARGELY: How the Shermans attacked from the higher grou towards the area where most of the hotels are located and met with considerable success during the initial stages of the battle. Later, however, after t troops were forced right back—*Drawing by H. P. Burton* *(See notes above at left)*

NDERGROUND PASSAGES OF BURIED AND DEMOLISHED CASSINO: A drawing which shows the extreme difficulty of forcing the Germans out of the town. Stone bound, and these were linked up with the surface dug-outs built by the enemy. Whilst the Germans were lying concealed in their hidden tunnels and shelters, Royal Engineers were endeavouring to clear the roads above—*Drawing by E. G. Lambert*

More intimate knowledge, and sometimes painful knowledge, of Cassino town proved the existence of much underground excavation. The stories of long, subterranean passages were naturally received with caution, but in a district of stone-built houses there is always a probability of extensive cellars and storage-rooms which may possibly be connected by lengthy passages. Detailed accounts of close fighting between our own troops and the defenders describe surface gun emplacements connected with cellars and passages below.

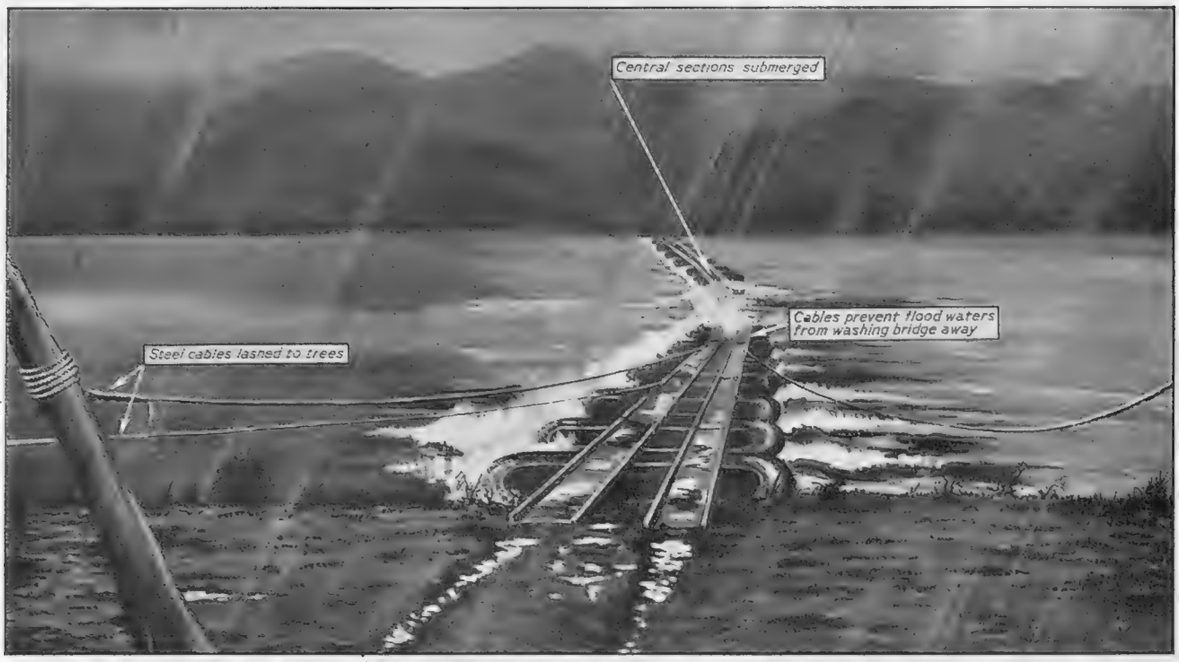
The capture of many of these underground strong-points was, of course, a difficult matter, requiring high training and a natural aptitude for this desperate type of work. In this semi-sectional view, the nature of the task is indicated in diagrammatic fashion. On the right, sappers are shown at work endeavouring to clear a way for the tanks among the huge masses of rubble and fallen masonry, rafters and girders. This, too, was a difficult task, with enemy sharp-shooters posted in the town and on the nearby hill-slopes

tween the station and town; they advanced rmans had emerged from underground, the Allied

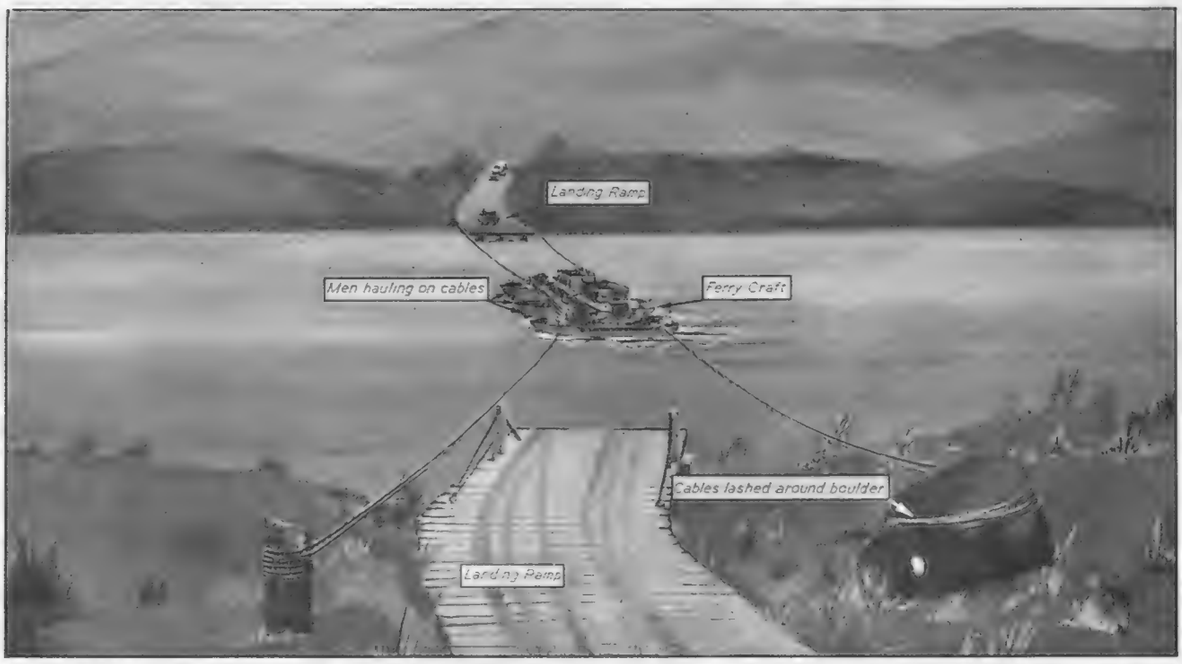
A SCENE DURING THE BATTLE FOR CASSINO: Every house which is not completely demolished may contain enemy snipers. These New Zealand infantrymen are cautiously searching one partly-demolished building in the town which may contain a desperate "suicide" squad of Germans

RAIN—and the Campaign in Italy

With Drawings and Photographs of Operations in the Anzio Beachhead



RAIN—ONE OF THE ENEMIES IN ITALY. After downpours which sometimes last for three months, the rivers have become swollen to a dangerous degree. Experience has shown that the pontoon-bridges require constant watching and strengthening with cables. When the rivers come down in spate, the centre section is apt to become submerged and carried away



TRANSPORT OPERATIONS ACROSS THE RIVERS, which all run at right angles across our lines of communication. This drawing shows how a transport ferry works: lashed pontoon craft form the ferry itself, with men hauling on the ropes

The exceptionally bad spell of weather which intervened to hamper the assault on Cassino was, unfortunately, only a crescendo of conditions which had been affecting the whole Italian front for many weeks back. Too often the phrase "bad weather" occurred in the official Allied communiqués; and too often it looked as if the elements were fighting against us. An examination of local records shows, however, that the forces of nature are to be found regularly operating in these regions in the winter-time. Certain roads and districts are known to be completely blocked by snow.

As March drew to a close, it was reported that certain road communications behind the Allied lines had become blocked; that the Rapido had risen 3 ft. suddenly; and so on. All the rivers with their catchment basins among the Apennines appear to be affected by heavy rainfall. This means that supplies to the front may be held up, owing to the flooding of the parallel rivers across which our lines of communication run.

Pontoon bridges, need constant watching: experience teaches when cables are necessary to take additional strains, and what types of structure best stand up to the rush of an angry, tempestuous river.

How rain has affected the entire military situation is here commented upon by Mr. Christopher Buckley: "Three weeks of intermittent rain have held the main Fifth Army front in Italy largely weather-bound during the period that followed the last attack of New Zealand and Indian troops against the Cassino position. This very factor of rain, which has prevented us from employing our air power on any significant scale against the enemy, has proved correspondingly favourable to the assumption of the offensive by Kesselring, the German C.-in-C., against our beachhead position. By an ironic inversion of the tactics of 1940 and 1941 the German Command now aims at synchronising its attacks with periods when the weather is likely to hinder the employment of air power by either side."

GERMAN PRISONERS OF WAR AWAITING TRANSPORT, after their capture at Anzio. Note the camouflaged suit worn by the prisoner in the centre—obviously a sniper. Some time ago the Japs announced that any Americans caught in the Pacific wearing such suits would be treated as spies, and shot!

A VERY TICKLISH JOB AT ANZIO: These U.S. engineers are removing charges from the sides of houses where they were set by the Germans to blast buildings and docks. Many soldiers would prefer to "go over the top" rather than carry out this dangerous work

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GERMAN PLANES USE MORTAR GUNS AGAINST THE DAYLIGHT-RAIDING FORTRESSES. Mustang fighters of the escort guarding the bombers fly in to attack the enemy as the latter attempt to interfere with the American formations—*Drawing by Roland Davies*

Some time ago the Germans introduced a new weapon for air combat: to break up the big formations in which the Flying Fortresses penetrate into the heart of Germany, the enemy equipped some of their aircraft with a mortar firing a shell as big as that of our 3-in. or 75-mm. gun. Flying out of machine-gun range, the Germans fired these shells rapidly into the bomber formation whilst remaining well away from the terrific fire-power of the concentrated American guns. As a reply to these mortar-equipped planes, the Americans reinforced their fighter escorts to shoot down the Nazis: then the enemy sent up escorts of Me. 109G fighters to protect the mortar machines. Now the U.S. Eighth Air Force has taken the battle of wits a stage farther: they are countering the latest Nazi plans by filling the sky with both bombers and with hordes of fighters

APPROACHING THE "LIT-UP" AREA OF A MAJOR GERMAN TARGET: The change from the friendly darkness of the night to the baleful glare of the searchlight concentrations as the night bombers near their objective—*Drawing by Roland Davies*

"At night you feel that the darkness is a sort of curtain to protect you from the enemy," a pilot said recently in describing a night-bombing trip to Germany. "Then when you get to the target everything is changed. In front of you is a huge, lit-up stage: it 's like a cage, specially baited to trap you, and you have to go in there deliberately and risk being trapped. As you come into the lighted-up area the curtain is whisked away from you and there you are, all naked, all alone." The pilot went on to say that Berlin is of great size. It takes about a quarter of an hour at least to get in and bomb and get out again. Sometimes it is said that Berlin is "as light as day": frequently it seems much worse than that—especially when the aircraft has to spend fifteen interminable minutes amongst the lights and the flak and the fighters! "It was a hotted-up daylight," said the same pilot, "a vicious light, burnt up with hundreds of flares and searchlights. There was no getting away from it. We came out of the darkness and suddenly our aircraft seemed simply to stop dead"

NEW DEVICES OF WAR

A Survey of Some of the New Weapons and Inventions Now being Used on the Battlefronts of the World

A SCENE WITHIN THE "GOLDEN ARROW," the Army's largest mobile wireless station. The high-speed vehicle shown on the right keeps armies in the field in touch with G.H.Q. and the War Office: it is operated by the Royal Corps of Signals

A MOBILE RADIO STATION FOR THE ARMY which can be set up in an open field in a short space of time—*Drawing by B. C. Wood*

Within three or four hours of arriving in an open field, men of the Royal Corps of Signals can instal a powerful wireless station and have it in full operation. Such units are engaged on various fronts and many more are ready for the invasion. They have heavy vehicles specially designed to provide the power and equipment for transmission and reception, and to carry collapsible masts, spare valves and other essentials. One officer and twenty-two operators are able to set up their apparatus at high speed. It is the mobile equivalent to a 3 kw. commercial wireless station which in peacetime would have taken from six to twelve months to erect. In one of the vehicles is a compact arrangement of instruments at which eight signalmen are able to deal with 30,000 words a day. They work in the greatest comfort, for the big lorry is air-conditioned and can be kept free from dust, flies and mosquitoes. The floor walls and roof are lagged with glass wool

A WREN "CONTROLLER" SIGNALS A PILOT TO TAKE OFF: Standing by the Runway Control Van on an isolated Fleet Air Arm Station, a Glasgow Wren flashes the "take-off" signal to the pilot of an aircraft. The van, which is in radio communication with the main Control Tower, is stationed at the end of the runway in use: from it the traffic of aircraft on to, and off, the runway of the aerodrome is directed

EXPRESSES FOR THE COMING SECOND FRONT: Powerfully suggestive of the drama behind the preparations for the invasion of the Continent, the mounting mass of materials produced by the factories and the training of men to use them, are these big American locomotives. They reach out into the distance, parked in a great train somewhere in the United Kingdom, awaiting the great day when the Second Front will open

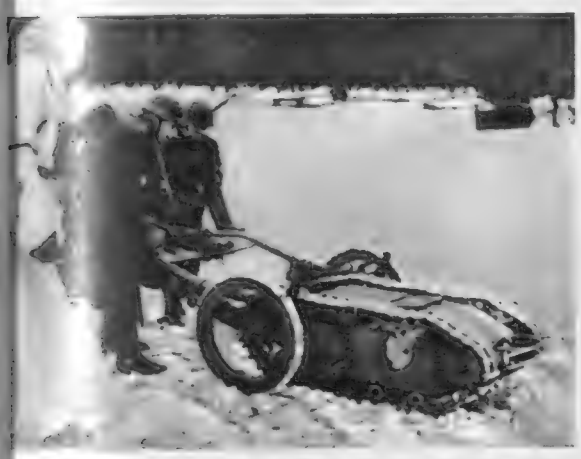
A NEW KIND OF RUNWAY CONSTRUCTION IN ITALY: Bricks being laid in herring-bone pattern—a job done by Sappers, helped by Basutos. The Airfield Construction Group worked in co-operation with the Desert Air Force throughout the North African and Sicilian campaigns. They are now engaged in laying landing-fields in Italy for Allied fighters and fighter-bombers. The construction of a weatherproof runway is a major consideration: to effect this, a new form of airfield construction is being used at one advanced landing-field in Central Italy. Bricks are obtained locally and are being laid in herring-bone pattern as shown in the above picture. Three hundred Sappers are engaged on this project and they are being helped by 600 Basutos specially brought over from Africa for this, and other, tasks

THE METAL-STRIP TYPE OF AERODROME RUNWAY. This is laid down in sheets, each of which joins up with its neighbour. Such runways can be laid on muddy, marshy ground and yet will withstand the weight of heavily-laden bombers. Quickness of construction is an added attraction of this type

BRITISH SOLDIERS TO HAVE "WELFARE GAME PACKS." **The contents of one of the packs laid open.** These are a free gift to the troops just issued by N.A.A.F.I. They will, in future, form part of each unit's equipment. Each pack contains an assortment of books and games sufficient to entertain 200 men should they find themselves isolated from other amusements during an operational lull. The packs weigh 30 lb. each and can be carried in a container by one man

BRITAIN'S LATEST TANK, THE CENTAUR, WHICH HAS JUST BEEN TAKEN OFF THE "SECRET LIST." **It is a cruiser mounting a 6-pounder gun and with a three-man turret**

In general outline the Centaur appears to follow established cruiser-tank lines. The main body is obviously of the Crusader family : the front part is shaped in the same way, and the two searchlights possess identical guards ; there is a five-guide wheel-track of standard form. What is novel about the Centaur is its superstructure ; the circular aperture on the left appears to indicate a right-hand drive, while above there appears to be something new in turrets. The Centaur is reported to accommodate three men : in fact, in comparison with certain other tanks, the turret may be quite a roomy affair. Access to the inside is gained through two hatches with heavy rectangular lids. The turret structure is of the bolted-plate type



THE EXPLOSIVE "BEETLE TANK" TURNS UP IN RUSSIA. This radio picture comes from the far northern front : it shows German troops unloading from a special transporter one of the Nazis' latest "secret weapons," which had previously appeared at Anzio. The Russians know it as "Goliath." It is filled with explosives and operates under remote electrical control : it is directed against strong-points and fired by means of a detonator. So far it has not been the success which the Germans had hoped for

MOBILE ARTILLERY ON THE EIGHTH ARMY FRONT IN ITALY : Self-propelled Bofors weapons for anti-aircraft gunnery mounted on a Morris chassis. The supply convoys of the Eighth Army have their own self-propelled anti-aircraft guns which travel the roads besides the transports. The famous Bofors gun, mounted on a Morris chassis, is largely used for this work. Being extremely mobile, it can be used under all conditions and in a varied type of country. It has a rate of fire of 180 rounds a minute and uses armour-piercing and high-explosive shells. The gun can also be used in a static capacity, when it is usually well camouflaged from air observation. This picture shows one of the Morris-mounted guns passing along a narrow winding road in a forward area on the Fifth Army's front

HUNT THE SNIPER : The difference between blancoed equipment and that which has been dulled to tone with its surroundings. Before the Army learnt to appreciate the significance of camouflage, many a man fondly imagined that, thanks to some magic power beyond mortal ken, he had only to stick a sprig of bracken to his tin hat or smear dun-coloured paint on his lorry for him and his vehicle to become instantly wrapped in the cloak of invisibility. Hard experience has taught a very different lesson. To-day, the Army knows that an appreciation of camouflage is a state of mind ; an instinctive reaction ; and a reasoned application of knowledge. Command Camouflage Schools are busy teaching the theory and practice to the troops in the fields, and using instructional films to ram home the lesson. At the heart of this vitally important matter of deceiving the questing eyes of the enemy is the Army Camouflage and Training Centre, where senior officers and training instructors attend courses that cover both theory and practice

The sniper on the left is seen quite clearly against the brick wall which forms the background : he has paid no attention to the essential art of camouflage. The sniper on the right has made himself part of his background by the use of old rags and other material : he is now almost invisible. Breaking up lines and making full use of one's background are important factors in the art of camouflage as taught at the Army's Camouflage Training Centre

THE WAR AND THE GENERAL POST OFFICE

Neither the Blitz nor the Invasion of Thousands of Americans has Arrested the Services of this Great Public Institution. By CHARLES GRAVES

THERE are three main corollaries to Second Front invasion plans—extra strain on the railways, on shipping, and on communications. So far, the General Post Office—largely responsible for communications—has not blazoned its achievements to the world via the Ministry of Information booklets and H.M. Stationery Office. Yet in spite of the shortage of paper, the work of the G.P.O. deserves to be put on contemporary record. Since the outbreak of war a network larger than the public system in peacetime has been set up. Since the arrival of the American troops, the G.P.O. has installed switchboards all over the country, and (originally) staffed them as well. It has handed over administrative buildings; it puts into envelopes all the incoming American V-mail, amounting to one quarter of a million a day, and then hands them over to the U.S. Army authorities. It has increased the installation of civilian telephones (quite apart from military ones) by 400,000 to 3,600,000—a very high figure per head of the population when it is remembered that over one million houses have been blitzed. This performance was only made possible by the training and employment of 5,500 women telephone engineers. In peacetime, no women were capable of doing this work.

In the meantime, telephone calls, telegrams and letters are increasing by leaps and bounds. Recently the G.P.O. registered an unwanted record when it handled one million trunk calls in daylight during a single week. This was done in spite of the departure of 72,000 employees to the Services.

To-day, the G.P.O. is the biggest single employer of labour in Great Britain, and the difference in the phraseology and the machinery of the telephone system between this country and the United States has added to the difficulties. American soldiers cannot, it seems, understand the words "Trunk" or "Toll" when applied to a call; and when the telephone operator announces "You're through," they often hang up the receiver in disgust, thinking that, in R.A.F. parlance, they have "had it."

So, as they seem reluctant to follow the old adage of "When in Rome do as the Romans," it has been found necessary to give various instructions to British telephone operators to adapt themselves to U.S. phraseology and instruct the caller to hold the wire instead of the line, and to refer to Long Distance instead of to Trunk Calls.

The average SPHERE reader, when he thinks of the Post Office, probably thinks in terms of telephone calls, telegrams, letters, stamps, and postal orders. One is inclined to forget all the other services provided by the G.P.O., which have increased enormously in volume as the result of the war. There are, for example, the War Pensions service and Billeting Allowances, Old Age Pensions and Widows' Pensions, Health and Pension Insurance stamps, Unemployment, Entertainment Duty, and Income Tax stamps; there are also various licences including Wireless Receiving licences, to be handled. In addition to these duties, the Post Office has distributed about 250,000,000 leaflets dealing with invasion, evacuation, and air raid precautions, among other things; it has made a series of distributions of Food Ration Books, each distribution weighing over 1,000 tons; it has distributed millions of petrol coupons, clothing vouchers, and clothing ration cards; while its Stores Department has supplied nearly 2,000,000 Civil Defence uniforms.

A growing difficulty which the Post Office has to face is provided by the paper shortage with a consequent re-employment of used envelopes—a motley collection of ink-smeared and often badly-labelled packets running into millions every year. In many cases the envelopes have been dispensed with entirely, and packets may be as "tuck-in" or sealed folders. Another problem arises from wrong addresses on letters and parcels. Evacuation has had much to do with this, but when you find that 3,000,000 of these defied all attempts at delivery in a single war year, you begin to realise with what the Post Office has had to contend. When it comes to tracing addresses on active service, the problem is still more acute.

The needs of the Post Office for aircraft capacity have to be considered in relation to the urgent requirements needed for the prosecution of the war. The Post Office introduced the Airgraph Service to meet the need for speedy postal communication to members of the Forces, who greatly exceed the numbers sent to the Middle East and India in the last war. The Airgraph Service was introduced with some trepidation, but has proved to be a great success, largely owing to Kodak; the total figures for all airgraphs sent and received up to last February being 216,000,000. Incidentally, a film roll representing two bags of mail containing 1,700 letters and weighing 50 lb., weighs only 5½ oz., and according to the Post Office, the time taken for letters to India now averages a fortnight compared with over a month by ordinary Air Mail, and eight weeks by surface mail.

It is very much to the credit of the G.P.O. that, although 200,000 airgraphs are frequently received in a single day, they are all sorted, numbered, photographed, and on their way overseas by the following morning. At 7 a.m., the staff begin opening the sealed envelopes. Within half an hour the Army Post Office staff have begun to sort them. The bundles are then split into batches of 1,700 for filming, as this number goes on one film. Each letter has to be numbered, and yet by 11 a.m., filming is in full swing. By 10 p.m. all airgraphs which have reached the section by 6 p.m. have been filmed and the last of them are on their way to the developing point, where processing and examination continue all night. By 7 o'clock next morning the films are ready for dispatch, and by noon are at the Airport, many miles from London, being loaded on to the aircraft.

There is only one branch of all its services in which the G.P.O. is enjoying a well-earned breather. This is the football pools postal orders section. But the postal order remittance business has, in general, expanded tremendously since the war and now runs into tens of millions per annum, the 5s. order (popular as at present for overseas troops) being now the favourite denomination.

The vast thrift movement encouraged by the Government has been another headache for the Post Office and its Savings Bank. By the end of January 1943 there were over 16,000,000 depositors with a bank balance of more than £1,000,000,000. It is safe to say that this figure is greatly exceeded to-day.

During the blitz, the G.P.O. set itself resolutely to the task of maintaining service to the public through thick and thin. Maintenance under air-raid conditions called for devoted and often heroic co-operation from the personnel. It also called for an enormous volume of repair work under extremely difficult and often highly dangerous conditions. In many cases the switchboards were located on the top floors of buildings, but the girls and men carried on calmly amid falling bombs while linesmen defied every risk in exposed places as they methodically mended vital cables. (The repair work involved the mending, in Greater London alone, of 1,700 cables, 3,000 joins and 500,000 wires between September 1940 and September 1941.)

The Post Office Information Bureaux in the provincial cities and London also deserve great credit. They had been set up with the primary object of handling incoming trunk calls to subscribers whose homes had been destroyed, and were provided with shorthand-typists to transmit messages immediately. When oral communication was essential, they arranged definite times for calls in advance. These bureaux also established directories of temporary addresses, and in Bristol alone 1,000 people used this service daily.

To-day, in the fifth year of the war, we certainly owe a debt of gratitude to the G.P.O. and Captain Harry Frederick Comfort Crookshank, the Postmaster-General. The G.P.O. has provided key men for the Royal Navy, the Royal Corps of Signals, the Royal Engineers, and the Royal Armoured Corps in particular. (It lost 40,000 men to the Services immediately the war started.) In spite of this, it has trained green labour up to a very high state of efficiency; it has been responsible for the correct sounding of the "Alerts" and "All-clears" from 10,000 different points throughout the country; it has handled innumerable calls between the various war factories and Government offices (the Admiralty, Air Ministry, War Office, M.A.P., Ministry of War Transport, and Ministry of Supply alone make 500,000 calls a day); and when the Second Front starts, the personnel of the Army Post Office units will consist almost entirely of former G.P.O. employees specially trained for this very ticklish job.

DURING THE INTENSIVE AIR RAIDS OF 1940-41. Correspondence addressed to buildings destroyed in the raids was kept: it was later obtained at the Poste Restante counter at the General Post Office in King Edward Street. Applicants claiming letters took evidence of identification with them

OVERCOMING TELEPHONE DIFFICULTIES: Post Office engineers of the Emergency Squad relaying cables through the bomb craters of London. Each cable carries hundreds of separate circuits. The engineers were assisted by soldiers in this work

SCHOOLBOYS AND SCHOOLGIRLS ASSIST WITH THE CHRISTMAS MAIL: Pupils from secondary schools worked during the peak period in sorting and delivering the heavy mails. No one under fifteen was employed

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

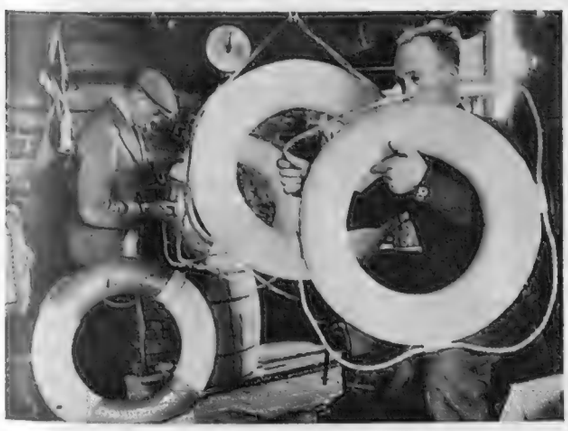
SCENES of ACTIVITIES on the HOME FRONT

WOMEN WHO OPERATE THE CANAL BOATS : Audrey Harper, twenty-two years of age and a former nurse, operates a barge-pole, whilst Evelyn Hunt, former camouflage research worker, looks on from the cabin

GIRLS WHO " MAN " THE CANAL BOATS ARRIVE AT THE " DOCK " TO TAKE OVER : Because more and more use will be made of the canals as a means of transport when the Second Front opens, the scheme for the training of women to handle the barges (begun by the Grand Union Canal Company in 1942) has now been reorganised by the Minister of War Transport. It is hoped that a number of additional boats, operated by women, will be brought into service during the next few months. At present they operate from London to Birmingham and Nottingham. The girls employed on the work do two trips, each taking about five days, and then have three days' leave. After their next two trips they get six days' leave. Three pounds a week is the minimum wage : the ages of the women employed range from twenty to fifty

TWO PRINCESSES TRAIN WITH BELGIAN WOMEN : Princess Marie Adela (on left) and Princess Elizabeth are the daughters of the Grand Duchess of Luxembourg. They are now undergoing training with other Belgian women for relief work, and their home is a camp in Kent. The training includes pitching tents, nursing, stretcher-carrying, rescue work and cooking over camp fires

THE W.A.A.F. MAKE THEIR OWN FURNITURE : *On left*—Sergeant Rhodes and Corporal de Courcy combing a salvage dump for materials. *On right*—Combined shelf-and-wardrobe fitting and chairs made from it. Flying Training Command W.A.A.F.s are solving the problem of furnishing their quarters by making furniture themselves, using junk and useless bits and pieces thrown on the salvage dumps. Pioneers in this effort to brighten the surroundings in which the girls have to live and work are Flight Officer Frances Stone, a former Nottingham school-teacher and Civil Air Guard pilot ; Sergeant E. M. Rhodes, grand-niece of Cecil Rhodes and ex-hat shopowner ; and an Irish girl, Corporal Stella de Courcy. The variety of furniture that can be made from scrap is limitless ; it includes chairs, lockers, rugs, cushions and tables, as well as vases and ash-trays. Thanks to scrap and women's ingenuity, the airwomen's quarters now have that homely atmosphere that so many girls miss when they enter the Service



FROM SAILMAKING TO REPAIRING LIFEBUOYS : For 200 years Starbuck's made sails and did a romantic trade in ships' stores at their quaint premises in West Street, Gravesend. One day a raider passed and put a hitch in the sailmaking business. Undismayed, Starbuck's have now taken to repairing lifebuoys. They say there is more need for lifebuoys than sails, anyhow !

MODEL SHIPS AND THEIR USE IN WARTIME : Mr. Savile Stott shows visitors some of the model fleet he has constructed : Mr. Stott is staff artist of Royal Mail Lines, Ltd. ; his peacetime hobby was the making of model ships. He has now found a way in which this pastime can be made to help the war effort. The little ships he makes now go to the National Appeals Director of the Merchant Navy Comforts Service ; after their receipt, they are presented by the latter to cities and towns in recognition of outstanding work in connection with Merchant Navy " Weeks "

The World of Books—By Vernon Fane

AUTOBIOGRAPHY, REMINISCENCE and ADVENTURE

The Travels of a Countryman; Life at Sea; Another Volume of Charles Graves' Personal Diary; Australian Adventure; The Faith Stirred by Devotion

EVERY Sunday there is a column in one of our great newspapers that can be read with pure delight, whatever the other news. It is discreetly signed "B. T.," and those are the initials of a man about whom George Moore said that he was the only living writer whose style he envied. B. T.'s weekly paragraphs are nature notes; a progressive chronicle of the year as it passes in the open air. He writes of harvests and of weather; of trees and birds, and occasionally of pests, of gardens and sometimes of men who walk in them; and in all he writes he preserves a wit and a sanity that make our reading an evergreen pleasure. For his autobiography Sir William Beach Thomas has chosen the appropriate title of THE WAY OF A COUNTRYMAN (Joseph. 10s. 6d.), though there is much here that seems foreign to such a tranquil introduction. In the last war, Sir William was a special correspondent on the Western Front, and later visited the Ruhr and Occupied Rhineland. He has travelled extensively: in Australia, Canada, New Zealand and, at the abrupt request of his friend Lord Northcliffe, round the world.

Wherever he voyaged, Sir William saw life with the naturalist's eye, and although he may aver that such a place as British Columbia "would make a tourist out of anyone," it is never a tourist's eye-view that is recorded in these pages. Here he is, for instance, writing about the most unpopular of prairie animals: "I am sorry for the gopher. He is the most engaging of the rodents. You might easily mistake him for a bird as he twists his little black head this way and that before wholly emerging from his hole. He looks up to the heaven for fear of the hawk and eagle. He searches every neighbouring bush for fear of lurking dog or bear. Though he has no friends and a host of enemies, he flourishes and has a merry look."

The other day at luncheon I sat next to a young sailor who was telling me something about the process of naval training during this war. "When we finally go to sea," he said, "we go in the little ships. If you're very lucky, you get a destroyer, and that's practically the Ritz Hotel to us." If you were luckier still, he continued, you saw some action, and he told me that he had had the superb good fortune to have been in the *Scharnhorst* action on his first trip to sea, whereas many a matelot has spent weeks at sea without seeing even minor enemy activity.

The young gentleman in VERY ORDINARY SEAMAN (Gollancz. 9s. 6d.) has much the same experience, though in his case they missed the *Scharnhorst* when they were in the Murmansk convoy that was his first naval experience. Mr. J. P. W. Mallalieu's book is one of those new hybrids; a novel in which all the events are real, but the characters to whom they happen imaginary. As a form it is not particularly satisfactory, except when, as in this case, those events are either so absorbing in detail or so exciting in breadth that criticism must stay in abeyance.

"But I don't think of sailors as heroes, either," writes the author in a little postscript. "They are not heroes—not in any story-book sense. They 'drip,' they 'chuck their hands in,' they are afraid. . . . Think of us as we really are—boys and young men who want to come home, but who go on going to sea and meeting the horrors which the sea can bring, partly because we have to, partly because we feel instinctively that there is not room in the world both for ourselves and for the Nazis."

That prodigious, and almost Wallacean worker, Mr. Charles Graves, has just published another volume of his personal diary, this one covering the period from August 1942 to November 1943. There is a very real value to GREAT DAYS (Hutchinson. 12s. 6d.) and to its two preceding volumes of wartime reminiscence; together they give a picture which will be immensely useful in the future, whether to recorders of an epoch, or to ordinary citizens like ourselves who want to remember just what a stinker that Wednesday night blitz was, or what we all felt like as the day-by-day reports came in from beleaguered Stalingrad, or more simply, what ingenuity one had to use to get a bottle of tolerable wine.

Mr. Graves, throughout this book, as the others, is primarily a Londoner, for which proud claim I have a fellow feeling. He is an active and belligerently-minded member of the Home Guard, whose history he has written, an impressive assimilator of information (one of the attributes of a good reporter) and a confirmed addict of the gregarious life. "The thing about old Charles is," as misanthropes are apt to mutter in their solitary corners, "that he likes *people*." He does more, a great deal more, than like them. He listens to them, he likes to hear them talk, he has a photographic memory for their experiences and, luckily for his readers, he has the ability to transfer to paper the tone and essence of their conversations and their personalities. He has his own, unorthodox way of doing it, but it is as effective as many more sober styles, and, personally, when I read of a gentleman of ninety-nine who is "an amazing old buster," I geta pretty clear idea of the character in question.

A MANSION IN SURREY — HATCHLANDS, NEAR EAST CLANDON — presented to the National Trust, with 421 acres of land: Captain H. S. Goodhart-Rendel has made the presentation. The property lies on the north side of the main Leatherhead-to-Guildford road: it is the first house acquired by the Trust definitely to be associated with the name of Robert Adam, who, in 1759, began on the interior of Hatchlands, finishing his work in 1761. Adam's internal decorations here are the earliest known work of that famous architect. The house was built for Admiral Boscawen, to whom the French Fleet surrendered at Louisberg in 1758. Captain Goodhart-Rendel, now serving with the Grenadier Guards, has been President of the Royal Institute of British Architects and Slade Professor at Oxford

A NEW SIGHT IN THE COUNTRY-SIDE: One of the national grain stores, 90 ft. in height, for drying and storing Britain's ever-increasing harvest. There are fifteen of them, and they have been built mainly on account of the greater use of combine harvesters, which cut and thresh the corn in one operation, dispensing with storing in the rick

THE POMMY COW (Davies. 9s. 6d.)—with as ungraceful a title as I have ever seen—is about a young Australian gold-miner at the beginning of this century, and his English sweetheart—his Pommy cow, in fact, for that is what he calls her in his simple, Antipodean way.

Apart from his command of the language, Mo Burdekin is an attractive character, and his adventures, first with his fellow Queenslanders in the Boer War, and then in the great fossicking days of Australia when gold-mines were to be had for the taking, make an extremely lively tale, which opens when Mo and three of their friends volunteer in 1900, and soon find themselves in South Africa.

Their discontent with everyone but the Boers, whom they are inclined to admire both for their fighting methods and their aims in fighting at all, grows steadily until they get down to the business of battle, and take part, with other Australians and with English troops, in the magnificent defence of a besieged camp. Before Mo is captured he has fallen in love with a young English governess there, and when he finally escapes from the Boer prison to a hospital ship, the thought of her is a consolation.

Mo needs that consolation, too, for he finds that the ship is, as far as he is concerned, pointed in the wrong direction and stubbornly sailing for England rather than Australia. All is well eventually, however, for Kate follows Mo on her own terms, and finally marries him after she has started a baby and he has discovered a gold-mine. You are mistaken, though, if you think that Miss Sarah Campion allows her novel a happy ending. It closes with a particularly wasteful tragedy, which may point some kind of moral, but to me only meant the loss of the one entirely likeable creature in the story's length.

I know, to my shame, very little of those days in Australia, but I have the strongest impression that they are authentically shown here.

THE MOUNTAIN OF LIGHT (Methuen. 9s.) is an example of that kind of novel in which there are so many threads that the reader needs the concentration of a Torquemada-solver to follow each through to its end. Dr. Catherine Gavin's premise evidently is that in every man's life, as in every woman's, there is a peak of personal faith towards which they are all striving in their different ways.

The author's Scots soldier and the woman he loved found it in their love for each other, and for a northern hillside. A Dutch refugee found it in his shining loyalty to his queen; a Norwegian in his devotion to a religious ideal which led him to return to Norway, and there take holy orders; a Frenchman found it in an unconscious love for his own land, which he could best express by taking part in a commando raid there, from which he was never to return.

There is an honesty and sincerity about this, but at the same time a certain diffuseness in the manner of its writing which is disappointing. When Dr. Gavin is giving us straight and graphic description, she is wholly admirable. When she relentlessly and logically pursues sub-plot after sub-plot, she tends to bewilder and overload us.

Two excellently-produced books have come to me this week, though both of them are of rather specialised interest. The first is ENCOMIUM MUSICES (Heffer. 30s.), a reproduction of a book of Flemish engravings, first published at the end of the sixteenth century and forming a collection of scenes of musical events from the Holy Scriptures. The title, of course, means a Eulogy of Music, and all the artists concerned were Flemings of Roman Catholic creed.

The second book is the SELECTED PLATES FROM THE UNIVERSAL PENMAN (Heffer. 30s.). The original book was printed about 1736, and these plates, by one George Bickham the Elder, have great appeal, even to the uninstructed in this art, and the balance and elegance of the pages is difficult to commend too highly.

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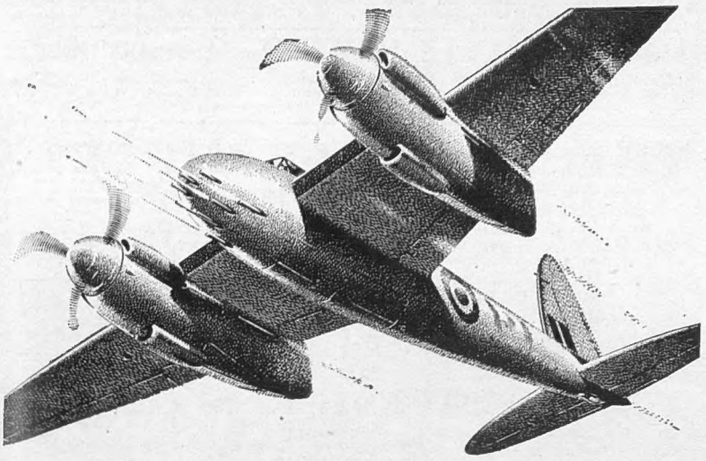

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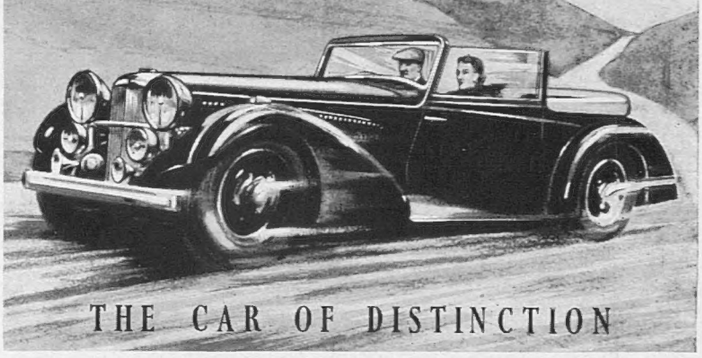

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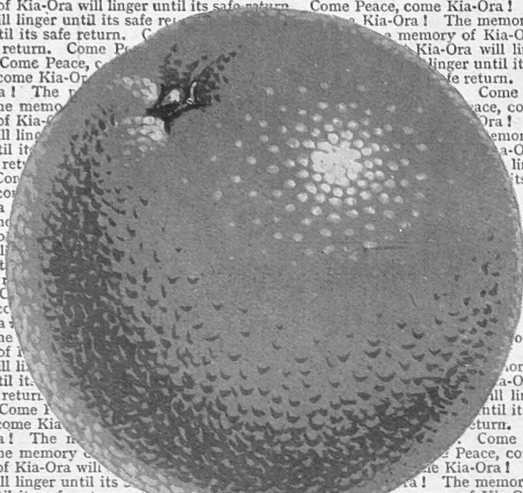

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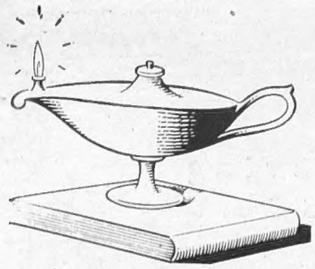

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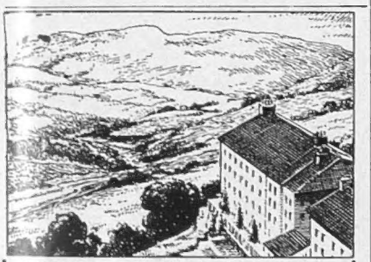

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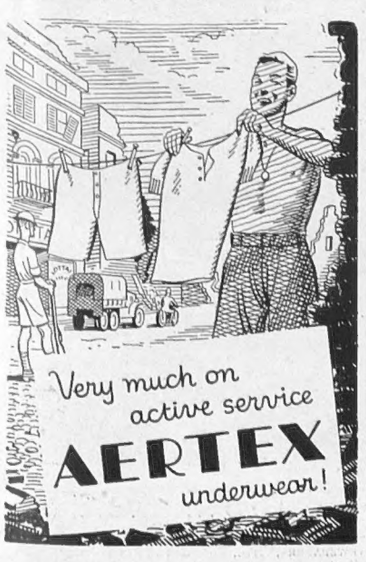

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